```
<210> 4881
<211> 2449
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (15)...(1066)
<223> similar to gi3874290 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

#### <400> 4881 60 cagacttgcg tetgtcaccg ggtcceteca ceettgtete etgtgcggcc agcgtcagag ccatggcgac ggaggagaag aagcccgaga ccgaggccgc cagagcacag ccaaccctt 120 egteateege cacteagage aageetacae etgtgaagee aaactatget etaaagttea 180 cccttgctgg ccacaccaaa gcagtgtcct ccgtgaaatt cagcccgaat ggagagtggc 240 300 tggcaagttc atctgctgat aaacttatta aaatttgggg cgcgtatgat gggaaatttg 360 agaaaaccat atctggtcac aagctgggaa tatccgatgt agcctggtcg tcagattcta accttcttgt ttctgcctca gatgacaaaa ccttgaagat atgggacgtg agctcgggca 420 480 agtgtctgaa aaccetgaag ggacacagta attatgtett ttgctgcaac ttcaateece 540 agtocaacct tattgtotca ggatoctttg acgaaagcgt gaggatatgg gatgtgaaaa cagggaagtg cetcaagact ttgccagete acteggatee agteteggee gttcatttta 600 660 ategtgatgg atecttgata gtttcaagta getatgatgg tetetgtege atetgggaca 720 cogoctcagg coagtgootg aagacgotca togatgacga caaccoccc gtgtottttg 780 tgaagttete eeegaaegge aaataeatee tggeegeeae getggaeaae aetetgaage 840 tctgggacta cagcaagggg aagtgcctga agacgtacac tggccacaag aatgagaaat 900 actgcatatt tgccaatttc tctgttactg gtgggaagtg gattgtgtct ggctcagagg 960 ataaccttgt ttacatctgg aaccttcaga cgaaagagat tgtacagaaa ctacaaggcc acacagatgt cgtgatctca acagcttgtc acccaacaga aaacatcatc gcctctgctg 1020 1080 cgctagaaaa tgacaaaaca attaaactgt ggaagagtga ctgctaagtc cctttgctcc 1140 tgcccgcgag agactgtcgg gaagttgacc cggattggca agaaacaggg tgtcttggag 1200 gtggtccccc agatetgcgc etgggggtca ggacagggcc tgatttgagc etcetetetg 1260 aagatgattt ggccgagcgg aaggtgtgga ccaccggaaa gttcttaaaa gttgctggtg acatttcttg ccaattctaa cactgtctag ggaagagttc ctagtctatt gtgttcaaac 1320 1380 agagtcaaca aaagttttta attttttatt acagaagggt gaagttcaat ttaacatgcg ttgtgttttt tcagtaaacg ttctgtatct ttttgatatt ccatgaccca gtgcacgctg 1440 1500 tggcctgtca ccgccaccgt ggccccgcca gctggcctcc cctttggccc acgccggccg 1560 cececattet etgetgegta gatgeeetgg eeeagggeee tgaeteetee atteeegeea gtagetgtte etagtgtatt ttegtettte tggaaaacag cattgagtgg ttgttttetg 1620 1680 tgtaaagage egtttgtgte ttgggagttt gtggeecaea tgeegatage aeggteateg cacatgacte tecegtttgt etcagtgtee etgcaacaag cagcacegca gactgtaata 1740 aaaggtgggg ttttgtgaat ggttgtggca agtgcgtcct tgtgaagctc gtctccatgt 1800 ggetttettg gagaaagget eeeetgggge aagagggtgg aaggtttett tggaeaggag 1860 gtgctgaggc tggctgcacc tgctctctga agacgctttc ctctctaggt tcattgttca 1920 gtgttgctgg gggcggggaa cgggggtggg gaggttctta gttgcgaagg agccaagctc 1980 2040 ctgatggact tgcgttggga tgtgggggac acctgtggca tggtaagget ccctgagtcc 2100 ettactccag gtcagatgcc agtgggactc atgggcccta tgagggctgc agggccagtg 2160 etgeceeteg gaeteetega ggggttgggt getaagegeg ageetegeeg teeetgetgg 2220 agecetegee tgeetgeeee tetgeetgtg eteetggeae tgtggettee eggtgeteae 2280 ctgcacagca gttaacagca gaggccgagc gggagcctct ggggagcgag gctgaaacct 2340 gaacctgccc atggagacag ttgtggtgag ggttgccaca cacagtgagg gcggagcagg 2400 gtggctgagg gcacaggtgc ttgggtctgt cccacggggc agggctttgg ggctgtgatg ctctgggaag ccagcttggg tcctgggtct acagagggcc ctggcccgg 2449

```
<210> 4882
<211> 729
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (264)...(642)
<223> similar to gi4588080 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

#### <400> 4882 aatttctgct gttttaagct agaaaatttg tgataattag ttgcagcagc tgtaggaaac 60 120 taatacaagt atgcatttga aactaattac agattttgaa ttgctttaaa tcttagtcta cgactatett gtgtttatag ttaagagett tttaaaaaaa agtatattaa ggactgaata 180 totqtcataa aaacaatgtt atatatgtat tattccattt atcctcacaa ggttactgtt 240 ttggttttat tttacctact gcagacgtgg ctggtggcta ttcatattcc atgcttgatg 300 caatcagaag agcagtgatg gtttccaata tccttttaat taataaggta aatgagaaaa 360 420 gcctcaccct caaagaagtc ttcagactag ctactcttgg aggaagccaa gccctggggc tggatggtga gattggaaac tttgaagtgg gcaaggaatt tgatgccatc ctgatcaacc 480 540 ccaaaqcate cqactetece attgacetgt tttatgggga cttttttggt gatatttetg 600 aggetetat ecagaagite etetatetag gagatgateg aaatattgaa gaggittatg tgggcggaaa gcaggtggtt ccgttttcca gctcagtgca ttatctatac ctggggccag 660 720 attitictgca ctitigaaatg tigeetitige ctaatgaaag aaacaattea ctiaccagee 729 tcctcaccc

```
<210> 4883
<211> 398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(69)
<223> similar to gi5726285 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

	,	. '		ı	•	
<400>	4883	•		•	, v <sup>2</sup>	
cctggtgaac	gctgtcccag	tgcacccgat	aatggcgaag	aaaatgtgcc	tctttcagga	60
aaagtatagg	aaatgagaga	agactgtgac	aactcatgac	ctgcatcctt	aatatccagt	120
			ccaggcaatg			180
ctaccactgc	aaagagttgt	aaccattttc	tggtatcaca	tttatttttc	aagacatact	240

```
tttcaagaca tcattcactg acccactace tgcattgagt ataaatgcct ggatgttaag 300 gattccaatt taactttgaa aagaactgte tcattcattt acatttetgt tacagtcage 360 ccaggaggtt acagtgaget etceactaag aatetggg 398
```

```
<210> 4884
<211> 6692
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2978)
<223> similar to gi2224607 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 4884

```
gagagagtaa gttggaggga aaggeggete aggacateaa agatgaggag eetggagaet
                                                                       60
tgggccgacc gaagcctgaa tgtgagggtt acgaccccaa cgccctgtat tgcatttgcc
                                                                      120
gccagcctca caacaacagg tttatgattt gctgtgaccg ctgtgaagaa tggtttcatg
                                                                      180
gcgattgtgt gggcatttct gaggctcgag ggaggctttt ggaaaggaat ggggaagact
                                                                      240
atatetgeec aaactgeace attetgeaag tgeaggatga gaeteattea gaaacggeag
                                                                      300
atcagcagga agctaaatgg agacctggag atgctgatgg caccgattgt acaagtatag
                                                                      360
gaacaataga gcagaagtct agcgaagacc aagggataaa gggtagaatt gagaaagctg
                                                                      420
caaatccaag tggcaagaag aaactcaaga tettccagce tggtcccggg cctgtcccca
                                                                      480
cccagctgcc tgtcctctgg caggtattgg aaattgctgt gtctagaagc atctctgcct
                                                                      540
tcacactctt gcactgcatt agctgcaagg tgatagaggc gcctggtgcc tcaaaatgta
                                                                      600
ttggccccgg gtgctgtcac gtggcgcagc ccgactcggt gtactgcagt aatgactgta
                                                                      660
tecteaaaca egeegeageg acaatgaagt ttetaagete aggtaaagaa cagaageeaa
                                                                      720
agectaaaga aaagatgaag atgaagecag agaageecag tetteegaaa tgeggtgete
                                                                      780
aggcaggtat taaaatctct tctgtgcaca agagaccagc tccagaaaaa aaagagacca
                                                                      840
cagtgaagaa ggcagtggtg gtccctgcgc ggagtgaagc actcgggaag gaagcagctt
                                                                      900
gtgagagcag cacgccgtcg tgggcgagcg atcacaatta caatgcagta aagccagaaa
                                                                      960
agactgctgc tccctcgccg tcactgttgt ataaatccac gaaggaagac aggaggtccg
                                                                     1020
aggagaaagc ggcagccacg gcagcctcaa agaaaacagc ccctccaggc tccacggtgg
                                                                     1080
gcaagcagcc tgcacctaga aacctcgtgc caaagaagtc ttcttttgct aatgtggcag
                                                                     1140
cagccacacc agccattaaa aagccaccct caggtttcaa gggcaccatc cccaagaggc
                                                                     1200
catggetete egetaceeca tegagtggtg etteagetge eaggeaggee ggaceggeae
                                                                     1260
ctgcagcggc gacggctgcc tccaagaagt tccctggctc cgctgctttg gtgggagccg
                                                                     1320
taaggaagcc agtggtacct tetgttecaa tggeetegee ageeceagga egeettgggg
                                                                     1380
ctatgagtgc tgcaccatcg cagccaaatt cacaaattcg gcaaaatatc agacgctcct
                                                                     1440
taaaagagat tttgtggaaa agagtcaatg acagcgatga cttaatcatg acagaaaacg
                                                                     1500
aagtaggaaa aattgccctc catattgaga aggagatgtt taacttgttt caagttacag
                                                                     1560
ataatcgcta caagagtaaa tatcgcagca tcatgttcaa cctgaaggac cctaaaaatc
                                                                     1620
agggactett ceategigtt eigegigagg aaatetetti ggegaaaeti gigagaetga
                                                                     1680
agccagaaga acttgtatet aaagagettt ecaegtggaa agagaggeea gegagatetg
                                                                     1740
tgatggagtc cagaactaaa ctgcacaatg aaagcaagaa gacggccccc aggcaggagg
                                                                     1800
ccatccccga tctggaggac tctccgccag tgtcggattc agaggaacag caagagtcag
                                                                     1860
cacgtgctgt ccctgagaag agcacagege egettetega egtetteage agcatgttga
                                                                     1920
aagacaccac cagtcagcac cgcgcacacc tettegatet caactgtaaa atttqcacaq
                                                                     1980
gccaggttcc ctccgcagaa gatgagccag ctccgaaaaa acaaaaattg tcagcttctg
                                                                     2040
```

```
2100
ttaagaaaga agacttaaaa tcaaagcatg acagctctgc acctgaccca gctccggatt
                                                                     2160
cagetgatga ggtgatgeeg gaggetgtge etgaagttge etetgageea ggeetagaaa
                                                                     2220
gtgcttctca tccaaatgtg gacagaacgt atttccctgg gcctccagga gatggccatc
                                                                     2280
ccqaqcctc cccgctggaa gacctgtccc cctgcccagc ctcctgtggg agcggggtgg
teaccacegt cacagitate ageoggace coaggacege tecaageagt teatgeacag
                                                                     2340
ccgtggcctc cgcagcatcc cgcccagaca gcacccacat ggtggaagcc agacaggatg
                                                                     2400
tgccgaagcc tgtcttgact tctgtgatgg tgcccaagtc catactagct aagccatcct
                                                                     2460
                                                                     2520
cateteetga eccaagatae etgteagtte eteegteace aaatateage aetteagaat
cacgttcccc tccagaggga gacacgaccc tctttttgtc tcgactcagc accatttgga
                                                                     2580
aaggatttat taacatgcag agtgtggcaa aatttgtcac taaggcgtat cctgtctctg
                                                                     2640
ggtgttttga ttacctcagt gaggatttgc ctgacacaat tcacattggt gggaggatcg
                                                                     2700
caccgaagac agtttgggat tatgttggca aactcaagtc ttctgtgtct aaggagctct
                                                                     2760
gtetgateeg ettecaceec gecacagagg aagaggaggt egectatate tetetetact
                                                                     2820
cctatttcag cagccgtggc cgctttggtg ttgtagctaa taacaacagg cacgtcaagg
                                                                     2880
acctetacet gatecegetg agegeeeagg accetgttee atecaaacte ttgecetttg
                                                                     2940
agggaccagg taagcgccgg ctttctgggt ggaggtgagg cccacctgca cctgcacccc
                                                                     3000
                                                                     3060
tecteceact gacatgeeet getgagteet gaccageeca gggetetetg ggagcaggag
ttaggagcac agacgcagcg gttagcaata ggattcatct ttgagggcgt aggactgtgg
                                                                     3120
cacgagaagt acccctgatt cacagcataa attgtcttag gagagttttt tagagaggga
                                                                     3180
aaaacccaca gcctgcaacc agctcatctt ggcctcaggt cagagaagac tcagtgccca
                                                                     3240
ggageceaag geteageeag aaagggaggt gacacteeca geggeeetge tettteetet
                                                                     3300
agacagacte gggagecage acacaceggg aagtggetee ateagggate aettetetaa
                                                                     3360
cagggatgga tttccaggag acttaacaat aatgacatag aaaactattt ctagaaataa
                                                                     3420
ttattttaaa atctgcagct caaattgtaa tagttcattc atctttggca agctattttg
                                                                     3480
tgtttgcacg ttccttggaa agtactgtat ttaaacgatt atttacaaat agcctaaaat
                                                                     3540
acatetttgt caagggttga gggtgattee aggggecaeg tgetetgtta gtgaecaget
                                                                     3600
ctttcatagc cccttagaag aagctgatgt gacttcagtt aggggttagt atctgatgcc
                                                                     3660
caactgaagt gtctccgtgg ccatgcagtc cccagaggat tggtgttctc tcaaagcggg
                                                                     3720
tgtgtggatc acacagtgtc ctctaaagtg cttcgtcata aaggcaggtg ctgtctggac
                                                                     3780
cetgtgcete agtgccetct gtccetgtca ccaggcetcg gegggtgttc ctgccatage
                                                                     3840
tgtgcagggt gttcccaccc acacccctca tgccgcaccc tagctagctg gggtcctgta
                                                                     3900
ggggccactc cacatcttgg gcgggacttc tgtcgcccca ggcacagccc acgttcctac
                                                                     3960
tggagcccat tetteacage tggagtggge teageetatg cetgtgttgt ggaattatat
                                                                     4020
gtccataaag ggattggttg gtatcagtaa tttcagggtt aaatatttgc tggcgtagtg
                                                                     4080
cattaaatta ttttagtgcc agataaattt ttaaaagcaa agtgctttag tgtgtcccct
                                                                     4140
caaatcctac ttgggataaa gagatgccac ctaatgggtg gcagaaagga ccctggtaga
                                                                     4200
ggttcttggt gttgcttgtg aagagetetg gecageteca egtgaecagg gagaggaaaa
                                                                     4260
geceggeeet cetggaggtg aagacegaga agetggeete teegcaeetg tgaaqaeeca
                                                                     4320
etggteagtt geaagtgega eagtgtgtge acteagtgea gaeactgeag eaceteagea
                                                                     4380
cctccctacc ggggtggaaa gagcactttt tctttacaga aacatgattc ttagatagcg
                                                                     4440
agecteeet tittaaaaca attgaagega tatticatee titetigage tieteteeet
                                                                     4500
geteatetee aaaettggag etgteaggtg ageaeaggtt gtagggtgtt gagegageee
                                                                     4560
cggcgcatgc cgggcaccgg gttccccaca ctgggcagtg acggggccca gggaggccac
                                                                     4620
cagaggageg gegeeteeat teteceeaca geaagggetg getgtgeagg tgeageeeeg
                                                                     4680
gggcagaggg aaaggacagg teteceagea eeteeeggat ggeaeeggga eaaggaggge
                                                                     4740
tgggctgggg tcactcacct tgtctgctga gtgcgatggc accaaccacc cacactgtca
                                                                     4800
geteegegae cagetggggg aacgtèacae tegeceaeca aggeaettge tgaggeeaeg
                                                                     4860
acgccgcctg acggggacac acaaaagccc cagggacttt gatccacgat aaagaqcaqa
                                                                     4920
ggcgtctggg taaagtaaca cagggcaagg gactttagaa aagtaacagc tagtgaaacc
                                                                     4980
tttccataca cttcagaaat gttttaactt aagacttcag tataatgtta acttctcctg
                                                                     5040
atgteettgt tgacatgaat gegtgtgegt gaaateteae acaetteeat ggteaetaaa
                                                                     5100
cageetteae eeegggeeag geeategggt acteggeeeg etteaegtae tgattaettg
                                                                     5160
acttggcgtt ttctagatat aaacatgtac atgtgtgtcc tggctttgtg gtgtaaatgt
                                                                     5220
gtagtgcgtg tgcatgtgcg cgcgtgtgtg tgtgtaaggc taggtcctgg cacgtttccc
                                                                     5280
ctgtctcagc ggaccctgtc ctcacggaga tagcccagaa gcccttggac agcacaggcc
                                                                     5340
acacctgagg gtgctgatgg tggtgactcc acagagctgt ggtcaggggt gagcatgtgc
                                                                     5400
tgcgcagett ggagtcaege ecceagaagt getgggtgag ggtetgeagg acceagetee
                                                                     5460
```

```
attccacage ctcagttctc tgcggcacat gcagcacagg cctgaaggag acctggcgcc
                                                                     5520
ccagcettga getgeeegte tgeateaggg cactgatgtg ggageatett cccctgggga
                                                                     5580
                                                                     5640
tgttaaggag aaggtcctgt tgggggtaga gattcacgca gaaaagagtg actgactcgt
ccgtgtgcct cagtttatac cacacaattg caggtgtcca tgcctcccac acatggggac
                                                                     5700
ctagtgggtt ttgacagcgt ggtgtccagt cctagccccc tcagtgcttg ctgttcacac
                                                                     5760
ttaagcaagt gaaggcctga aggtgcccag ctgtgccctc aggggaaact taagtcaccc
                                                                     5820
                                                                     5880
gecetyteag caettygece ttgtegggea gtgagagtyg agetyeecee geageaceet
                                                                     5940
caggagecat geagtteaca geagtagetg gateteeetg aggaeatttg teettgeata
tettaatgat ttgtccacag aaacaceggg ttgtetteet etgeceetet geeeegeagt
                                                                     6000
gggggcacte tetgtaacte ageateacag tggggggeag etgggaggee tggtteeagg
                                                                     6060
tgaccttete cacctagatg ttcaccecae teagttecag etttaccaae agggeecece
                                                                     6120
geaggaactt ggggtegeag agteeeggee tgteteaggg eettgtteat ggaagggaga
                                                                     6180
tgagtcaggt tgaaagctca tcgtgtaggg ttctgtgcgg ggcccttaca ggactggacc
                                                                     6240
gcagccaaga tgcctgcctg ttaaccatgc ccagccccg tcatttccgc gtgaagccgc
                                                                     6300
aggeetegga geettggtet gaaatgeetg tggagtaace teggteeata aacatgggtg
                                                                     6360
cacagtetgt tetececaag tacagggeag gaggaaacac egecetetgt agetgetega
                                                                     6420
atggaaaggg ctctttctc tgaggtcttt atacattaga aagctcttct gggaagaatg
                                                                     6480
tttgaatcca tagtgtcttt ctgtattcac ttttaattgc tttctaaatt agctgagaaa
                                                                     6540
ttctgacttg aaatattgtc aggtaagcat ttcttcagtt ttcatgtgtg tatgtaacag
                                                                     6600
tagetttgca tggaaattgt aatcagagte aaatacagta ttgaatggaa tgtactgeet
                                                                     6660
tctcctccta aatcaataaa catctttcat gg
                                                                     6692
```

```
<210> 4885
<211> 684
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(215)
<223> similar to gi1052737 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4885
atatatgaga actggggcga atgatgtgaa acgccatcgg tggttccgct ctgtggactg
                                                                       60
gaaagetgtt ceteagagaa aactgaagee teecategtg cecaagatag ceegegaagg
                                                                      120
cgacacetec aactteggaa ettaceeega gaatgaetgg gacacageeg egacegtgee
                                                                      180
gcagaagggt ttagaaatct tcaagaattt ctgaggacag gagctcacat ctggaagaag
                                                                      240
caggaagget ggaatetgee tgeaacaaag agetgeteet gageagacea gtageaatgt
                                                                      300
cttcttcacg tgataaggac atttccactt ttctgtcttt gtgcctgtat gtatagaaac
                                                                      360
agatcagage acagttgaaa ttaatgtaac tggcattatt taagcaactg gaattecaca
                                                                      420
ctgtaggaag gttttgaaaa ttgtttgctt gtagatttta tettateett tagtgttgtg
                                                                      480
ttcctactgt gatgtcttgg tttttctcat agacttaagt ttataagtta tgaactcgac
                                                                      540
ttgttcaatt ataaccacaa attgtgtgtg tgtgtgtgtg tgtgtgtgca tgcgcgcgcc
                                                                      600
tgtgtgtata tatagaagtc attatggcag atccacagaa attgtgcaat gatgtaaatg
                                                                      660
ttcatacttc acagagectg tatt
                                                                      684
```

```
<210> 4886
<211> 1893
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(893)
<223> similar to gi6010480 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4886
caagaatggc agcacaggcc cccacttaga taagaagaag gtccagcaac tccctgacca
                                                                       60
ttttggacca gecegtgeet etgtggtgtt geageagget gtëcaggeet gtategaetg
                                                                      120
tgcttatcac cagaaaaccg tcttcagctt cctcaagcaa ggccatggtg gtgaggttat
                                                                      180
ctcagccgtg tttgaccggg aacagcatac cctcaacctc ccagcagtca acagcatcac
                                                                      240
ctacgtcctc cgcttcctgg agaaactctg ccacaacctt cgtagtgaca atctgtttgg
                                                                      300
caaccagece tttacacaga etcaettgte acteaetgce atagagtaca gecacageca
                                                                      360
cgacaggtac ctaccaggtg aaacctttgt cctggggaat, aqtctqqccc qctccttqqa
                                                                      420
accacactca gactcaatgg actctgcctc aaatcccacc aaccttgtca gcacctccca
                                                                      480
aaggcaccgg cccttgcttt catcctgtgg cctcccacca agcactgcct cagctgtgcg
                                                                      540
caggetatge tecaggggag tgttaaaagg atcaaatgaa agaagggata tggaatcatt
                                                                      600
ttggaaacta aatcgttccc cagggtcgga ccgatacctg gagagccgcg atgcctctcg
                                                                      660
actgagtggc cgggacccct cctcatggac agtcgaggat gtgatgcagt ttgtccggga
                                                                      720
agetgateet cagettggae eccaegetga ectgtttege aaacaegaga tegatggeaa
                                                                      780
ggccctgctg ctgctgcgca gtgacatgat gatgaagtac atgggcctga agctggggcc
                                                                      840<sup>´</sup>
tgcactcaag ctctcctacc acattgaccg gctgaagcag ggcaagttct gaaccaggag
                                                                      900
aggcageeta gacaaccaag tggcagcagg tgggggcatt etfetaggaa tgaggggcat
                                                                      960
cageceaeee caggeaeete agtggggtte egggeeaeet caggaeteea agaggetgtg
                                                                     1020
tggagccacc actcctagcc acagctgcca tgataagtcc ttccatgaag gactgaggag
                                                                     1080
ggagagtggg ggtccagggc tggtgctgct cttccctcag ctctgccggg gctctaaggt
                                                                     1140
ccctctattt atttctcaac cctggctggc ctctcaccag gagtttaggc tgaatgcctt
                                                                     1200
ccacgtgatg gaggaaaagg ccaactctgt cctggtcttg ctgtggcacc ccatcgccc
                                                                     1260
acagetegta cetteteace agatteecet gaateeaaac tegtggtgea aacetetace
                                                                     1320
ttttttacaa aaagatetta ttgttaattt attgtttetg geaettggge aaaceetgta
                                                                     1380
gttaatactc ctcccacact agacactggg tttcaggagg agggagactg ccctgctttg
                                                                     1440
gtcccagaga ggccctctgc agataggcgt ggcccctctt cagaggacac taccctaggg
                                                                     1500
cactttetet ttgaggtgga gagacccata aageettgae cacateaete catatgggga
                                                                     1560
ggagaaggat coetgteace tteteetete tteaegggge cettttgeag ceetaggeet
                                                                     1620
catctgtggg aagggagtcc ctggcttata ctgccccac cacagctcct tgccctggcc
                                                                     1680
agaactgctg tcgaagaaaa tcaggccgga aggccaagaa ggcgctaagg gggatgggag
                                                                     1740
ggcaggtttt ccaggctgga gtcggttcca cccactcgcc tgtccacagg cttccttqta
                                                                     1800
agcaagtcag cagcacagct actcacgctg ccatctggac ttattttatg tcaatctgtt
                                                                     1860
tataaataaa aaccaatata gataaaaaaa aaa
                                                                     1893
```

```
<210> 4887
<211> 1319
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(1320)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (231)...(437)
<223> similar to gi549986 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4887
ataaaatatt agggactttt cttggtagag atggaaatcc aaataaacgg aatgtgcaca
                                                                       60
atgaaacatc tatgcatttg ttgtgtatgg gacctcaaat tatgatatct gaaggagccc
                                                                      120
ttcatcctcg cttggcacgc cccacagaag atgatttcag aagagcagat tgtctgcaga
                                                                      180
tggtcttaaa atggaaagga gcaaaacttg accagggtga atatgagaga gcagctattg
                                                                      240
atgetgttga taacaaaaaa aacacccet tgeactatge tgetgeetea gggatgaaag
                                                                      300
cctgtgtaga gcttttagta aaacatggag gagacttgtt tgctgagaat gaaaataaag
                                                                      360
atactectig tgattgtget gaaaagcaac accacaaaga tttggccctc aatetggaat
                                                                      420
ctcaaatggt attctcacgg gatcccgagg ctgaagaaat agaagctgaa tatgctgcat
                                                                      480
tagacaaacg agagccatat gaaggattaa ggcctcagga tcttcgtaga ctaaaagata
                                                                     540
tgettattgt ggaaactgea gacatgette aggeteetet etttaetget gaagetttae
                                                                      600
ttegagetea tgaetgggae agggagaaat taettgaage ttggatgtee aaceeggaga
                                                                      660
actgetgeca acgateaggt gtteaaatge caactecace accaagtggg tataatgeet
                                                                      720
gggacacget cecateteca agaactecaa ggactacacg etettetgte aceteecag
                                                                      780
atgaaatcag cttatctcct ggggatttag acaccagttt gtgtgacatt tgtatgtgca
                                                                      840
gtatctctgt atttgaagac cctgtggata tgccctgtgg acatgacttt tgtagaggat
                                                                      900
gttgggagte gtgagtatat gageacetta geatetetta etgeatgata geactetgat
                                                                     960
ttgttaataa aattgtttgc tttcagtatt taatgatgca aattgtttat attgacttct
                                                                     1020
gagttacaca gaaatgaatt tagactttac tagtaaggaa aaatattitt gtttttattt
                                                                     1080
ttacgtette eccagetatt ttaattaatg etatttaget taatgtaagg tacetttaga
                                                                     1140
aacaaagcag gtatacaaat aatttttctt agtattttag tttatattac atctaatgta
                                                                     1200
aatttcaggc aagaatcagt ttgtcttata tcccaggaat cttaagcatt tggttntgtg
                                                                     1260
ctgtctcaat tttttgtgac aaccaaattg ccttgaaaat ctttaagaat atagatgtt
                                                                     1319
```

```
<210> 4888
<211> 1586
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1333)...(488)
<223> similar to gi726395 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4888
tttttttttg gtggttctca aactgtgttc ctagaagcat cccatgtgcc cccaggccaa
                                                                       60
gaggtccagg ttctaccccg acccacatcc cctgaatcag agcagctttt ttttttttt
                                                                      120
aaaaattttg atctgtttca cacattatat ttgtttgaac ttcccatgtt taaaaatttt
                                                                      180
gaagaaaatc cctggagtag acaatcccta gagcactgac atgctgtggt ccaaggttca
                                                                      240
ccaggaacag tgcctgtgcc ctgccacatg gcggggttcc ttcaagcctc tggtgatgaa
                                                                      300
ggtgctcagg gaaaggagga cggaggggcg cggaaggacc cagccactgc tggccaccct
                                                                      360
ggcctctgct ctgtgttcac gggggagcag actctgggga ggcgcccctc ctcaccacgg
                                                                      420
ectgcaggcc gggctggagc ctgcgccttc aggggccttg catctccagc tggaccccct
                                                                      480
ggcacaggat gtgctgcagt agcccgttga ccacatccag agtctcgtcc ttctccagca
                                                                      540
cgatgtcata ggagtccatg tagcgctccc gccgctcctc caccttgtca ttcaggaagc
                                                                      600
                                                                      660
caattttgag aatgttctgc acaccaggaa ccccatcggc catggtgagg tccccgatag
agtotoccag caggatgaca ttggttttgc cotcaagttg ctggaagtaa ccacagttot
                                                                      720
cacacgcaga gctgttcttg ttgtatgtgt gtatgagctg gcccttaaat ccctggagaa
                                                                      780
                                                                      840
aaccatcttc attaaaatcc atgtagttag acacgatgtg gatgttgggg tggaacactt
tcatctgtcg gataatttct tccaggatat caccaatgcc cgcagaaaag atgaaaaggg
                                                                      900
gaatgttgtt atggtagagt gtgttgaaga aggtcttata tccctccctg agcattgcat
                                                                      960
tggactetet aaccacetgg getatetgaa acttetgaat ettetgetga cataggagat
                                                                     1020
tgtgcgcttt ggtccaccat tccaccatat gaggtagctt ctccttgacg gtccggtgtg
                                                                     1080
ggtcgatctc aattgggtaa tagtggtgaa ggagcgctgt gagctctttc cgacactcct
                                                                     1140
cactgatgat cttgctatta tccagaatat tgtaagaaga agggcatcgc tttccattat
                                                                     1200
atgcaaacct gctcaaggtc atgtcaaaat cagaaatcac ctgtaaccgg tctccgccgc
                                                                     1260
cettgeggag ggegeecaeg ateteetgea ceegeecagg etgeegeate aggaeegtgg
                                                                     1320
cetteateag ggtgeteace tgteeegaga ceegagagaa ceaetgaace etgegeeacg
                                                                     1380
ctgggcccga ggggagcccg gggctcgctc gggcgcgcgt gtgaggcggg gccggggtgc
                                                                     1440
gegaggggge ggetactgge etgggtgaag eggeggtgee teggtgaeea getgggggge
                                                                     1500
tegaagegee cegggggteg gagteeggge cegeceact ceggacgett ceteceteet
                                                                     1560
cacctccaca accatcccgt tcgagg
                                                                     1586
```

```
<210> 4889
<211> 5241
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5242)...(889)
<223> similar to gi2224553 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 4889
tettaattet aeteeggaaa gaaaaatttt taacageeag ggaattgggg ttggtttee
                                                               60
cccttttccc cttaaaaatt ttttttttcc ccaaaagcct taaattttgg aggggggtg
                                                               120
ggcccataag tccccccccc aaaaaaaagg ttcttttcca aaaatcccaa ggagggtttt
                                                               180
aaatggcccc ccataaagaa aaaaatttta ccttgccaac cccgggtaaa attgggcccc
                                                               240
300
tegeteattg eggetteteg geacagtaag aaatattgea catgateaac atgttttgtt
                                                               360
ctggggaagg gggcaagggc agggggaatc accttcttag aaagtacaac ccaagttggg
                                                               420
agggcagagg gggtgaggag aaaaccctcc ccgtgcctgt ggcaaagtgc aggagccccc
                                                              480
acccccaaac taacctgagt ccagcccctc tggggaaaaa aggggtgcat gaactccccc
                                                               540
```

```
600
tattccacag gcgcctccct gtggcccaag gcctgcacca ccctccaget tgcagccctc
acaggagcca ttttgcataa agtgaaaagc tctgaaggtc acacgctcca ggttatgtac
                                                                     660
aggggettgg aggagggaga etgeceetge ageceeteag etgeceeca geacegggag
                                                                     720
ggagettega gggaaggggg tatttacaag aggageagge eteatteege eecaaactgg
                                                                     780
                                                                     840
agaggacgaa atggctttac Ccgggaggag ataaccttcc tgcccccaca tactgtccat
                                                                     900
gtcctgaggg ggtactataa gtcctggcat cttctcaggg gtccctcacc tgcctgtggc
                                                                     960
agetgtggag ggacetgggg gtgggggga gggetgggga geceeetece ageeaggetg
                                                                    1020
tecaggeece gaetetgggg gtggaggeag tggeggggea geetgggeeg tgeeagagte
cgagctgggt gaggtggggt cagggcccc tgcggggctg ggagtggggg caggggcagc
                                                                    1080
ageggtgeea gtggggggeg gtacagggag aggageetea geteeagggg getgeteegt
                                                                    1140
                                                                    1200
gggagtggca gcctgcatga tcttctggcg cacctcacgg atcttcaact gcagacaaac
cttggaggga aagatgtctg catageggge ctggaaggeg getgtggeet gggetgaegg
                                                                    1260
gaagaagcca tggtcctgaa agagctgcat gaccagggcc cggcgctggt ccagggtgcg
                                                                    1320
                                                                    1380
ccgcagggag gagtatggca ccttgtcata ctctagctcc ccaagcacgt cctcggcttc
tgtacctgta cagtcaaagg tgaagatgtc cccctcgcac ttggcactct tgggggtgtt
                                                                    1440
gggctccgag ctgcagctgg agcgtcttct catcttgcgc ttgggcgagg tggggtcctc
                                                                    1500
gggtgctgaa tccaggtccg tggagttctt cctcttcttg cggtaagagc ccaggatggc
                                                                    1560
ceggggtgag gtggccagag actgcagggt gggggagggc agcacetect caggcegaaa
                                                                    1620
etcaggeaac tcagcaaage getettegaa gtecaettet gacaggacee tgttgtecae
                                                                    1680
agagtcaaag gtcttcttca ggggcggggg ccgcaccttc accttcttgc cagtaccagc
                                                                    1740
egecteettg egeteegggg tgteeeegge tgeeegeeea etgetgetet egetgetgee
                                                                    1800
accagggget acagetggag etggggeegg getgggagga gtggggagget eeccaegatt
                                                                    1860
etccaggece tgeecaggga egegecagte tgaagatgag etggggaatt tgetggecat
                                                                    1920
ggtctcaggg cccttggcgc tggtccgctc ctcagcaggt gggggcagtg gggggctgct
                                                                    1980
eegggeegtg ggagteeagg tetetggeag gggtggaggg getggtggtg tgggetgeee
                                                                    2040
etcaagetca gaetetgggg cagttggete teggaetggg ecaggeteca gaggetgeeg
                                                                    2100
gggtgcaggg ccaggccgcc cagaggcacc tgcctcaaag gaccccacgg gaatgctggc
                                                                    2160
gatggctgcc ttcactttct ggggggcctt cgggctgggc cgctgggcct tgggggccac
                                                                    2220
taagetgtag gteatggaae etgetgtgge getggggaaa gggetagteg gggetggggt
                                                                    2280
ggcagtggca ggggctggcg ggcccttggg cagaatggtg gctgcaggtg gggttgtgct
                                                                    2340
ggtggccaca gtgtagacca ggcttggggg ggcctgggat ggctgggcca ggggtgctga
                                                                    2400
ggaggtgggt gcagggctgc cagagtaaaa tgctgttatg acaggacctc cgggggctgc
                                                                    2460
acaggcaggc ggcagctggg gactgggcac aggtgacacg cccacctgac cgggagccag
                                                                    2520
cagtggggct tggcctgctg agagcagggg ctgcacgaag gcggggccgc tgggccccag
                                                                    2580
cgaggtgaag cctagagcta cagagctcgt gggcccgtac gaggtgactg ttccagcctg
                                                                    2640
getggaegea gggetggtae ecaggggeag egegtgeeeg ecegetgaet geacataggt
                                                                    2700
gattctggtg gaggaggca acaggacctt ctgaggctga gaggtgggtc cagggagtgt
                                                                    2760
ggctgggccc aggggcggca ccaggccgct gggtgtgctc acaggcaccg gggtcagctg
                                                                    2820
gatgatettg etgggggget gggcaccatt etgcacaggt actgagaagg gegggeteac
                                                                    2880
cagtggcagt ggctggccgg cccctccacc ccgcactgac atgctagggg cggccagagg
                                                                    2940
cactaggace tteccaggea geagetggge tgagecacee gggggegggg cetgeaeggg
                                                                    3000
agaaactgac tgggctttgg ggggtggggc ggagggtaca gactgcagga tggggatgcc
                                                                    3060
aggagtgggt gcagtggcag ccaggacttt gccgttggtg gaagtgcccg gtgggagggt
                                                                    3120
gaaacggatg ctggtggtgg gtgcagggcc gctgggagcc gctgccttgg tcccaqqqqc
                                                                    3180
3240
ctgggtgatt cccccagcct tgcccagggc acctggttgc aggatgccca ggggtactgg
                                                                    3300
cccattgggg ccactcccag cacctgctcc tgagcccgca gtggtcccac caccaggggc
                                                                    3360
cccctgggca atgaactgga cagcaggggg cgcaggggcc ccataccccg gggtgcccac
                                                                    3420
cagtaggtta gtgacagtgg caggcgcctt ccccacagtg cccagcaggg gtccagccac
                                                                    3480
caagtgtggg getggtgagg tggetgetge egaettettg teegaataca etaagetgae
                                                                    3540
acccageggg gageceecag geaccegaga eccagtgeec attteagtee tggeacetge
                                                                    3600
tgtgtcattt ggagacgcct cagcccggcc agaggtgggg aagggcttag aggcgatggg
                                                                    3660
cacaggagtg ctgctgacag gccgcaccac attggtgacc atggtggcgg caggacggga
                                                                    3720
caggggaget getggggeec cataggeeag tgatggggeg ggggeggagg geactetgge
                                                                    3780
teegeegeee tettgeteet eettgtttgg gggeageace agtgtetgea ggatgtttee
                                                                    3840
tecteegetg ggaggggeeg egatgaetga ggggeetggt ggeteeagge cacceacaet
                                                                    3900
ttcgggtctc ttgcgccgga aggtggcagg atccattggg aggaaccggg ttgccttgga
                                                                    3960
```

```
aggtgtcgct ggacccccag ccccaggggg tgggggccgt agggggcccg ctgtgctgcc
                                                                     4020
                                                                     4080
ctgaccagac tcctgggcct tgaaggttcc tgagcccagt gagaaggagg tggctgccga
                                                                     4140
qqctqaqqaq qaagcaggcg aggacgcaga ggaggatggg gcggaaccat agcctttgcc
                                                                     4200
aaaggetaca ggaggateeg ggggeeetgg gggeteaggg teeagtgggg ggeggeagtg
                                                                     4260
ggtaaaggag gaacggatca caggtgaaaa ccccttccga ccaaagccct tgttgccctt
                                                                     4320
tgggteetee eeagagetgt eeceactete getgteggte accegeteet tgeacttgag
atcaatgtca gtggtgccga agccattgtc agcaatgaca tcatcatccc cttcctcctc
                                                                     4380
                                                                     4440
acagatgace atgegeteet cateactegt catgteetea etggeegeae getgagaaeg
                                                                     4500
agaagetegg gtgggeagea gegggggeeg cecagtggee gecaaggeae etceeteaee
aggggctgca aagggtcctg gagctccata ctgggtagaa ggctttgggc cagagtacga
                                                                     4560
tgcagggcca gacaccatct gcgtcagttc ctgtagcgcc tgactgtcta cttctccgcc
                                                                     4620
gtccaggctg tgtaccccgc tgtgggagaa agctcggggc cgggctgagc caggtccccc
                                                                     4680
                                                                     4740
aactgtgtgt agccgttctg ccccacagga gctgctcccc ggagccttgg tgtctgagct
                                                                     4800
caggagtgtc tgggctgcaa cggacaggag ctcagaggac accccagggg cagcagcagt
                                                                     4860
geocgtetee gaeatgetee geteeegegt eteettgtge eeteetgeea geeecagget
                                                                     4920
cqtqqqcttq gcctctqagc tggacttctt tcggtccttg ttgcaccact tccaatctgg
                                                                     4980
gtgggccttg aagtgggcct cettcacetg gaaggccagg tegtggtact tttgcttete
cttgggcccc agggcatacc accactcgcc caggatcttg ctgacggtcc ggttgtcctg
                                                                     5040
gttgggatga cgctggtgga ccagggcccg gtgccgcttg ctgaagatca tgaaggcatt
                                                                     5100
catgggccgc cggatgtggt ccttctcccg cttgttgggg ctgcgtccat ccttctcaga
                                                                     5160
                                                                     5220
agatgagtcc cgttccttgg gtagggcact gagggactgg gtccgacgtt ttccgggcgg
                                                                     5241
tagaggcaac tggatctcag g
```

```
<210> 4890
<211> 395
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(396)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3)...(83)
<223> similar to gi164386 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4890
tcatgtctat gattgaccct ccccgggctg ctgtgccaga tgctgtgggc aagtgccgaa 60
gcgcaggcat caaggtactg gcctccatc ctcccctcca ttctagcctc ccccatgcca 120
gagttcaagg agctgcagtg gctgctgccc tggaaaggcc caggccacgg nggcctcctt 180
cccactgact caaagaagaa gctgtccatc tgcaaggaaa ggcccacccc tgccttgggg 240
cactcaccct tatccctttt gctcagagag gccagtgtcc catgccctc ctctccctcc 300
ctggcacagc tctttgtccc atctgcatgt gtacccttcc attctgattt gaagcataat 360
ctggcactcc tatctgaag acctagttgt cctaa
```

```
<210> 4891
<211> 744
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(596)
<223> similar to gi219867 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

#### <400> 4891 60 catectggga acagtgtate ttttgetgga gaaccatete tgegtgeaag agaeggeegt 120 ctcctgtgag agettcatca tggagtcggc caatggctgg catgacatca tgttccagct ggagttettt atgeceeteg geateatett attttgetee tteaagattg tttggageet 180 gaggcggagg cagcagctgg ccagacaggc tcggatgaag aaggcgaccc ggttcatcat 240 ggtggtggca attgtgttca tcacatgcta cctgcccagc gtgtctgcta gactctattt 300 cctctggacg gtgccctcga gtgcctgcga tccctctgtc catggggccc tgcacataac 360 420 ceteagette acetacatga acageatget ggateceetg gtgtattatt ttteaageee 480 ctcctttccc aaattctaca acaagctcaa aatctgcagt ctgaaaccca agcagccagg acactcaaaa acacaaaggc cggaagagat gccaatttcg aacctcggtc gcaggagttg 540 catcagtgtg gcaaatagtt tccaaagcca gtctgatggg caatgggatc cccacattgt 600 660 tgagtggcac tgaacaagca gaccaacaac actgaggaag atagagtggt gacttagaat 720 taactcgtgc taaggggtcg ggggctttga aaatgccacc cccctttctt attgcaagac 744 ggcttctcgc acatgaactg catc

```
<210> 4892
<211> 1790
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (50)...(238)
<223> similar to gi4884190 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4892
gcgtcgacat tgaggaattc atggtaactt ctgaaaattt aaccgaagaa taaaattaag 60
agcctcaaaa tcagtttcca atggaacagc taagcctgcc acttctgaga actttgatga 120
agatttgaag tgggtagaag aaaatattcc ctcttcattc acagatgtag ctcttccagt 180
gttagtggat tcagatgagg aaatcatgac cagatctgaa atggctgaaa aaatgttctc 240
ttcagaaaag ataatgtgat tggaacccgt ataagaaatg tagttaagcc tgaaggacta 300
tccttcatca agactgaaag tgagctttga tttgatattg cctaaaaatt tttattgtgt 360
tatcttggaa gtctgtgtat caaaatgaag aattcagatg gtaggaggtt ctatagtcct 420
```

```
tttaaagctg actcttgagt gtcagttgaa tatccattaa attggatttg gaaataacct
                                                                      480
gaggaaagta ttatgataaa gatctgcaca gatgcctctt agctgatagg tgggcaggcc
                                                                      540
tgtgggtttg gggttctccc tcttttctct ggaacatatg acaattccag attaaagaaa
                                                                      600 -
aatgtttttt aataaatacc cttggtcttt cttctagtca cctttgaggt agatattgtg
                                                                      660
                                                                      720
attttctgga gtatagtata tccgtgtctc tgtgtcttag gtttactaga tgcaataata
                                                                      780
cttctctttg acatttgtac tgaagtgatt tgatattaag ttaaacagtt aatgtttgaa
                                                                      840
tattggcata tttataggtt ttttccgctc ccccccaacc cacccgtttt taaaaaaatct
                                                                      900
atacaaagcc cttgtttgag tctcatcatg cacatcaaat catggagtta ggtcttctct
gageteaggg gaacacaagt geacagagag agatgtettg agggteacta ceaaagaatt
                                                                      960
acceteatty teceteacte aggeeatgty tacatgegat getgetgagt gtgctggggg
                                                                     1020
tgggtggtgg ccacgtggct cccccagagc acttcctaac tggcaagctg ggagacccat
                                                                     1080
tactggtgaa ctttgtggaa attagaactg tatcttttac ataatcttgg catattacat
                                                                     1140
ttcataataa aaacatacat ttagttgcat gctacatcac tattgatttt ataattaatt
                                                                     1200
tettaagett caaccatgtt ttatacetta tttegttaca teatatatgt gtaatgtgta
                                                                     1260
atatggaaat cttttggctt taatgtcctt tttttaaaat gtagaatgtt ctaaacttga
                                                                     1320
aaggcaattg aatgtagtat gatgaaaatg tgaatgtttt gctgctttca tgaccaaaga
                                                                     1380
                                                                     1440
tacagggcta gtggacattt agaataataa ttaaagctag agtcttgtat gtcttttctt
tgaaggagtt ctaaccttgt aaattgagaa tgacttcaga gaattttgat taagaaaaca
                                                                     1500
ttaaaatctt aaccggcaca aacactccaa ttttttttca ctgtggaagc cgcaagcaat
                                                                     1560
ttttttttc tttttctttc aaaagcctgc cttctgaatt tatttcttgt ttactcattt
                                                                     1620
                                                                     1680
cagagagggt agtaaagaag atctatttct ggtagtcata tcgcttgaaa ggtattggta
aaggggttgg cgagtcgtga ccatgtggaa agggaacagt gttggcagag attggggaga
                                                                     1740
                                                                     1790
aaatcaggcg tgtcagggtg cccttgctgt gggatatcct tcctagggag
```

```
<210> 4893
<211> 11
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(145)
<223> similar to gi3916257 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4893 gaaaaaaaaa a

11

```
<210> 4894
<211> 439
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(339)
```

<223> similar to gi306785 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 4894
                                                                       60
agteaatget greagtittt teccaaatgg atatgeette gecaetgget etgatgatge
cacttgccgg ctctttgacc ttcgtgcaga tcaagagtta ttattgtatt ctcatgacaa
                                                                      120
tatcatctgt ggaatcactt ctgtagcctt ctcaaaaagt gggcgtctct tgttggctgg
                                                                      180
                                                                      240
ttacqatqac tttaattgta atgtatggga cacgctaaaa ggagatcgtg caggtgtcct
                                                                      300
tgctggtcat gacaaccgtg tgagctgctt aggtgtaact gatgatggca tggctgtggc
                                                                      360
aacaggetet tgggacagtt ttettagaat etggaattaa eagtgteeat acatatttgt
                                                                      420
tctccattga tatatctgga gaaatcaatg ctacagccta tagctgtgaa aaaattctac
                                                                      439
cttatatttg caggtgaag
```

```
<211> 2111
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2112)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (7)...(888)
<223> similar to gi488196 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 4895

<400> 4895 cgagtagtga atcgcatgag ccgtttccag aaaagtgctg gactggaaga gattgaacaa 60 gaactgacgt ctaagcaagg aggtcgctgt agccctgttc cagggctatc aagcagccct 120 180 tetgggteae cettgeatgg gaaactgaae agceaagaet cetataacaa ttttaccaae aacaaccetg gcaacceteg geteteteet etteccaget tgatggtagt gatgeetett 240 300 gcacaaatca agcagccaat gacattgggg accatcacca aacgaaccgg caaagttaaa 360 cctcctccac aaatttcacc cagcaaatcg atgggcggag aattttgtgt ggctgctatc tteggaacat ecaggicatg gittgcaaat aatgeaggic igaaaagaga aaaagateag 420 480 tccaaacaag ttgtagttga gtccctgtac attatcagtt gctatggcac cttagtggaa cacatgatgg agcogogacc cotcagoact gcacccaaga ttagtgacga cacaccactg 540 600 gaaatgatga catcgcctcg agccagctgg actctggtta gaacccctca atggaatgaa ttgcagccac cgtttaatgc aaaccaccct ctgctcctcg ctgcagatgc agtacagtat 660 tateagttee tgettgetgg cetggtteee cetggaagte etgggeeeat taetegaeat 720 gggtettacg acagtttage ttetgaccat agtggacagg aagatgaaga atggetttee 780 caggttgaaa ttgtaacaca cactggaccc catagacgtc tgtggatggg tccacagttc 840 cagttcaaaa ccatccatcc ctcaggccaa accacagtta tctcatccag ttcatctgtg 900 ttgcagtete atggteegag tgacaegeea cageetettt tggattttga tacagatgat 960 cttgatetea acagteteag gatecageea gteegetetg acceegteag catgecaggg

```
1080
tcatcccgtc cagtctctga tcgaagggga gtttccacag tgattgatgc tgcctcaggt
                                                                     1140
acctttgaca ggagcgtgac cctgctggag gtgtgcggga gctggcctga gggcttcggg
                                                                     1200
ctgcggcaca tgtcctccat ggagcacacg gaggagggcc tccgggagcg acttgccgac
                                                                     1260
gccatggccg agtcacatnt agccgggacg tcgtgggatc cggaacagaa cttcagcgag
                                                                     1320
agggaagcat cgagactetg agtaacaget caggetecae cageggeage ataccaagaa
                                                                     1380
actitigating ctacchatct concine accasting and ccanting and continue accitition
cgactggctt cccgtaggta ccagcaacct gcttctgact ggccagcccc ctcccctgct
                                                                     1440
                                                                     1500
ggaggagggg agaagccccg ctctggtcct accettcagt ctctgctctt ccttcatcaa
ccaccttccc caagettagt gacageagec geccatecta cetggatgga gaagagaeee
                                                                     1560
                                                                     1620
ttetecaage aceteagege acttgecete tgecacacet gteggtggag getgtggeca
                                                                     1680
ggagagactg tagaagctcg gtccctgtgt atgtttgcat atgacatcct gcattggatc
cgcttttgta ttttttaacc atacccacgg tgggggggt ggggggagcc tggaacagtg
                                                                     1740
                                                                     1800
accagatetg ggggcetgag tggggacaga gttgategte cacetggcca ttttgaceet
                                                                     1860
gagtggacag teacageete ageteatgte tggetgtgae acaeaetgee eccagettee
cttggtcagc cccactccag cacggggtga acggaggccc agagtactag ggaaggagga
                                                                     1920
agggaggaca tgcctcttct tcctcctttc tttccccatc tgttcctggg aagagtttgt
                                                                     1980
                                                                     2040
ctttcttatc tttaagcccc tttaccctgg tcctgtactg atcagtgaag gaaaccgtgg
ttactgaggc cctgttgaaa agtgcacgtc ttgtccaata aatcacgctg cagttggtgt
                                                                     2100
                                                                     2111
ccaaaaaaaa a
```

```
<210> 4896
<211> 1849
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1487)
<223> similar to gi5911314 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4896
atgeeteagt tactgeaaaa cattaatggg ateategagg cetteaggeg etatgeaagg
                                                                       60
acggagggca actgcacagc gctcacccga ggggagctga aaagactctt ggagcaagag
                                                                      120
tttgccgatg tgattgtgaa accccacgat ccagcaactg tggatgaggt cctgcgtctg
                                                                      180
ctggatgaag accacacagg gactgtggaa ttcaaggaat tcctggtctt agtgtttaaa
                                                                      240
gttgcccagg cetgtttcaa gacaetgage gagagtgetg agggageetg eggetetcaa
                                                                      300
gagtetggaa geeteeacte tggggeeteg eaggagetgg gegaaggaea gagaagtgge
                                                                      360
actgaagtgg gaagggcggg gaaagggcag cattatgagg ggagcagcca cagacagagc
                                                                      420
cagcagggtt ccagagggca gaacaggcct ggggttcaga cccagggtca ggccactggc
                                                                      480
tetgegtggg teageageta tgacaggeaa getgagteee agagecagga aagaataage
                                                                      540
                                                                      600
ccgcagatac aactetetgg gcagacagag cagacccaga aagetggaga aggcaagagg
aatcagacaa cagagatgag gccagagaga cagccacaga ccagggaaca ggacagagcc
                                                                      660
caccagacag gtgagactgt gactggatct ggaactcaga cccaggcagg tgccacccag
                                                                      720
actgtggage aggacagcag ccaccagaca ggaagaacca gcaagcagac acaggaggce
                                                                      780
accaatgacc agaacagagg gactgagacc cacggtcaag gcaggagcca gaccagccag
                                                                      840
gctgtgacag gaggacatgc tcagatacag gcagggacac acacccagac acccacccag
                                                                      900
                                                                      960
accgtggage aggacagcag ceaccagaca ggaagcacca gcacccagac acaggagtec
accaatggcc agaacagagg gactgagatc cacggtcaag gcaggagcca gaccagccag
                                                                     1020
gctgtgacag gaggacacac tcagatacag gcagggtcac acaccgagac tgtggagcag
                                                                     1080
```

```
gacagaagcc aaactgtaag ccacggaggg gctagagaac agggacagac ccagacgcag
                                                                     1200
ccaggcagtg gtcaaagatg gatgcaagtg agcaacctg aggcaggaga gacagtaccg
ggaggacagg cccagactgg ggcaagcact gagtcaggaa ggcaggagtg gagcagcact
                                                                     1260
cacccaagge getgtgtgae agaagggeag ggagacagae ageccacagt ggttggtgag
                                                                     1320
quatgggttg atgaccactc aagggagaca gtgatcctca ggctggacca gggcaacttg
                                                                     1380
cataccagtg tttcctcagc acagggccag gatgcagccc agtcagaaga gaagcgaggc
                                                                     1440
atcacageta gagagetgta tteetaettg agaageaeca agecatgaet teecegaete
                                                                     1500
caatgtccag tactggaaga agacagctgg agagagtttg gcttgtcctg catggccaat
                                                                     1560
                                                                     1620
ccagtgggtg catccetgga catcagetet teattatgea gettecettt taggtettte
tcaatgagat aatttctgca aggagetttc tatcctgaac tcttctttct tacctgcttt
                                                                     1680
gcggtgcaga ccctctcagg agcaggaaga ctcagagcaa gtcacccctt tgtactgaat
                                                                     1740
                                                                     1800
tgtcctcatc ttgggggggg tttcaggact atttttatct ctgacatctc tctattgccc
catctaccct aatgcatcaa taaaacctta agccactgga aaaaaaaaa
                                                                     1849
```

```
<210> 4897
<211> 421
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (113)...(321)
<223> similar to gi212485 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4897
eggacgegtg ggcagageag catateteca teattggcat teaceateae tatgaaggge
                                                                       60
ttcactgctt ttgccatcct tggtctagca gtcactgctt gggctacctc gccatatggg
                                                                      120
acaaagagat caagaatttc aactcagaaa acttcatgaa ggtaaatgta ttcagtgtac
                                                                      180
caggitatici gaggicatgia ccatggacta cacacticac tgtggatcig atggaaatgi
                                                                      240
atattccaac agatgtacct tttgcaatac cgttgtgaag agccaaggtg caatttggtt
                                                                      300
gaaaaattat ggattgtgct gaatctccct gatgcttaag gatatcaagt ctcctttggc
                                                                      360
agattccact tagataacca gtttgtcttg gacggctgag gaggcaagca ataatctggt
                                                                      420
                                                                      421
```

```
<210> 4898

<211> 792

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(793)

<223> n = a,t,c or g
```

<221> misc\_feature <222> (696)...(174) <223> similar to gi3873871 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

## <400> 4898 ttttttttt ttctcggcac aaaagctcat gatttaatga ggaacagaaa caaaatctct 60 gattgttggt gtttcaaact tcattggcgt cctctggcaa gcacaagttg atccctctgc 120 agetteaata ccetttagee tgatgacage tteatttaac agateatttt teettgatgg 180 aggtggcaag cgtaacagtg ttctgggcct gcttcagtaa tggcatgtcg atcatactcc 240 cttggaaagt aaaggccccc tttcctaatt gttgatgttc tttaaaggca gcaatcagtt 300 cttcagccca cttaattttt tcaggggaag gagaaaactg ctcctggacc acggcaattt 360 ggttagggtg aatcacctgc ttaccagtga agcccatggc ggctccttct cgtgactgtc 420 taagcagccc agctccatct cgaaagtcaa tgtacaccag atctacggct tggagaccaa 480 aggetttege tatgacaaca atettttgee gggegtagag aatateeagg gtttetttae 540 tacttgttgc acctatgctg gctcgaaagt cttctcctcc aaaaacgact gcatctagaa 600 agagacetae ttgaggeeg acetteaggg tttetteaca caetgeetta aaattgagea 660 aacccattgc agtttccaca aaagggatta aattcattgg ttgttcaagt tttcqqcctt 720 ttaagtggaa tgaaaatttg tctgcaaact aaaatcagaa gtgaattcgc qcacacaacn 780 tagggtctcg at 792 -

```
<210> 4899
<211> 3414
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1192)
<223> similar to gi386787 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4899
ggcaggaggg agggagccag aggaaaagaa gaggaggaga aggaggagga cccggggagg
                                                                       60
gaggegegge gegggaggag gaggggegea geegeggage eagtggeeee gettggaege
                                                                      120
getgetetee agataceeee ggageteeag eegegeggat egegegetee egeegetetg
                                                                      180
eccetaaact tetgeegtag etceetttea ageeagegaa tttatteett aaaaccagaa
                                                                      240
actgaacctc ggcacgggaa aggagtccgc ggaggagcaa aaccacagca gagcaagaag
                                                                      300
agcttcagag agcagccttc ccggagcacc aactccgtgt cgggagtgca gaaaccaaca
                                                                      360
agtgagaggg cgccgcgttc ccggggcgca gctgcgggcg gcgggagcag gcgcaqqaqq
                                                                      420 "
aggaagegag egeceeegag eeeegageee gagteeeega geetgageeg caategetge
                                                                      480
ggtactctgc teeggatteg tgtgegeggg etegeegage getgggeagg aggettegtt
                                                                      540
ttgccctggt tgcaagcagc ggctgggagc agccggtccc tgggggaatat gcggcgcgc
                                                                      600
tggatcetge teacettggg ettggtggee tgegtgtegg eggagtegag ageagagetg
                                                                      660
acatetgata aagacatgta cettgacaac agetecattg aagaagette aggagtgtat
                                                                      720
cctattgatg acgatgacta cgcttctgcg tctggctcgg gagctgatga ggatgtagag
                                                                      780
agtocagago tgacaacato togacoactt coaaagatao tgttgactag tgotgotoca
                                                                      840
```

```
aaagtggaaa ccacgacgct gaatatacag aacaagatac ctgctcagac aaagtcacct
                                                                      900
gaagaaactg ataaagagaa agttcacctc tctgactcag aaaggaaaat ggacccagcc
                                                                      960
gaagaggata caaatgtgta tactgagaaa cactcagaca gtctgtttaa acggacagaa
                                                                     1020
gtectageag ctgtcattgc tggtggagtt attggctttc tetttgcaat ttttcttatc
                                                                     1080
ctgctgttgg tgtatcgcat gagaaagaag gatgaaggaa gctatgacct tggagaacgc
                                                                     1140
aaaccatcca gtgctgctta tcagaaggca cctactaagg agttttatgc gtaaaactcc
                                                                     1200
aacttagtgt ctctatttat gagatcactg aacttttcaa aataaagctt ttgcatagaa
                                                                     1260
taatgaagat ctttgttttt tgttttcatt aaagagccat tctggcactt taatgataaa
                                                                     1320
atcccattgt âtttaaaaca tttcatgtat ttctttagaa caacataaaa ttaaaattta
                                                                     1380
acatctgcag tgttctgtga atagcagtgg caaaatatta tgttatgaaa accctcgatg
                                                                     1440
ttcatggaat tggtttaaac ttttatgcgc aaatacaaaa tgattgtctt tttcctatga
                                                                     1500
ctcaaagatg aaagctgttt catttgtgtc agcatgtctc agattgacct taccaagttg
                                                                     1560
gtettaettt gttaatttat etgttgteee etteetetee tetgeeetee ettettgtge
                                                                     1620
ccttaaaacc aaaccctatg ccttttgtag ctgtcatggt gcaatttgtc tttggaaaat
                                                                     1680
tcagataatg gtaatttagt gtatatgtga ttttcaaata tgtaaacttt aacttccact
                                                                     1740
ttgtataaat ttttaagtgt cagactatcc attttacact tgctttattt ttcattacct
                                                                     1800
gtagctttgg gcagatttgc aacagcaaat taatgtgtaa aattggatta ttactacaaa
                                                                     1860
accetttagt catatctatc taatcagatc ttcttttggg aggatttgat gtaagttact
                                                                     1920
gacaagcctc agcaaaccca aagatgttaa cagtatttta agaagttgct gcagattcct
                                                                     1980
ttggccactg tatttgttaa tttcttgcaa tttgaaggta cgagtagagg tttaaagaaa
                                                                     2040
aatcagtttt tgttettaaa aatgeattta agttgtaaae gtetttttaa geetttgaag
                                                                     21'00
tgcctctgat tctatgtaac ttgttgcaga ctggtgttaa tgagtatatg taacagttta
                                                                     2160
aaaaaaaagt tggtatttta taagcacaga caattctaat ggtaactttt gtagtcttat
                                                                     2220
gaatagacat aaattgtaat ttgggaacat aaaaactact gaataaatca tgtggcctaa
                                                                     2280
tattgaaaat gtcactgtta taaattttgt acatttttga tcaaatgtac atctccctt
                                                                     2340
tgctaacggc cgtctgctct caggttgacg tgggtttgat ttctaagtgt ttcacagtgt
                                                                     2400 ·
ctgtaaatca agaccaaaga geetgtegat gagaetgttt attaccagat teaettetga
                                                                     2460
attggccaga ggaaatctga atgtattatc ctgtgtgtgt ctaggtagag atattggaag
                                                                     2520
gctgccaggg gatttcgaag tttgcaacct ttataggata actgatggca atattaagac
                                                                     2580
agacgcctgc ttttgcaaat aacttacaag actgtaaatt ccaaagatct gaatggggct
                                                                     2640
ttcctgatgt tggtatctaa ggcttaggcc tatagattga tttacctttg gaattgtgct
                                                                     2700
ccaaatgtct actgaagctt aaccgaagaa ctaataaatg gactacagta gctcacgtta
                                                                     2760
cagggaacca ccctaggcag ggaggctctg tgtgttaaaa tgagggtctc actgctttag
                                                                     2820
gattgaagtg gctggaaaga gtgatgcctg gggaaggaga tggagttatg agggtactgt
                                                                     2880
ggctggtact ttctgtacta aacatttcct ttttctattt taccactaat tttcttttaa
                                                                     2940
actgtgagcc gtccaagtca gaagaagaca gcaaaaaaag caacttttcc aacatacaat
                                                                     3000
ttacttttaa taaagtatga atatttcatt ttgagaacat tccctggaat tgccacataa
                                                                     3060
ttcattaaaa acattttttt aagcaacact tggaacagtg tttactttaa atccttaatg
                                                                     3120
gccttaatta attctcagat tcctgcccca tcacttacag aaccaattca ctttagagtg
                                                                     3180
actaaaagga aacgatagcc tagctttcta aagccacgct gtgtccctca attacagagg
                                                                     3240
gtaggaatgg gtatacetet aactgtgeaa ageagagtga aatteaatte atagaataae
                                                                     3300
aactgctggg aatatccgtg ccaggaaaag aaaaatttct ggcaaatatt ttgtcactgc
                                                                     3360
tgtaaagcaa aatatttgtg aaagtgccaa aataaagtct gtcatgccaa aagt
                                                                     3414
```

```
<210> 4900
<211> 1463
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (145)...(702)
<223> similar to gi3928000 in the genepept database release 114,
```

# Run with FASTXY 3.3t00, default parameters

```
<400> 4900
cgtgtgctcc tcacattcac gcagactgag actgagctgc ccgaggaaga gtgtgaaggc
                                                                    60
cccaagetge ccacegaacg gecetgeete etggaageat gtgatgagag eceggeetee
                                                                   120
cgagagctag acatecetet ceetgaggac agagagaega ettacgaetg ggagtaeget
                                                                   180
gggttcaccc cttgcacagc aacatgcgtg ggaggccatc aagaagccat agcagtgtgc
                                                                   240
ttacatatcc agacccagca gacagtcaat gacagcttgt gtgatatggt ccaccgtcct
                                                                   300
ccagccatga gccaggcctg taacacagag ccctgtcccc ccaggtggca tgtgggctct
                                                                   360
tgggggccct gctcagctac ctgtggagtt ggaattcaga cccgagatgt gtactgcctg
                                                                   420
cacccagggg agacccctgc ccctcctgag gagtgccgag atgaaaagcc ccatgcttta
                                                                   480
caagcatgca atcagtttga ctgccctcct ggctggcaca ttgaagaatg gcagcagtgt
                                                                   540
tccaggactt gtggcggggg aactcagaac agaagagtca cctgtcggca gctgctaacg
                                                                   600
gatggcagct ttttgaatct ctcagatgaa ttgtgccaag gacccaaggc atcgtctcac
                                                                   660
aagteetgtg eeaggaeaga etgteeteea catttagetg tgggagaetg gtegaaggag
                                                                   720
cattcaatgc aagaggacaa tggagcagga tctacacaat tctaaagaaa agcaagcatg
                                                                   780
actcaaggat ttcctcttca tcctgtgttc ttcatgtaga gagacagcag agaggcagtc
                                                                   840
agagaatact gtctgataag cccttgaaaa agctgtaggg ccaagatgag atacagagat
                                                                   900
gactcaaaac agagaatcca ggaatgcata gatcctggta aaaaaggtgg gagatgagta
                                                                   960
1020
ataaatatca gaaatettga cattatetaa ataataaaat gaaaaetaat tgagatttgg
                                                                  1080
agagatgagg tagatgatat agtttggctg tgtccccacc caaatctcat attgaattqt
                                                                  1140
ageteceata atececatgt gttgtgggag ggaeceagta agaggtaatt gaateatggg
                                                                  1200
gatgggtttt tctcatactg ttcttgtgac agtgaataag tctcatgaga tatgatggtt
                                                                  1260
tcataaaggg cacttcccct gcacacgttc tcttgcttgc cagcatataa gacataacta
                                                                  1320
cataactttg ctcctccttt gccttctgcc atgattatga ggcctcccca ggcatgtgga
                                                                  1380
actgagtcaa ttaaacctct ttttctttat aaattaccca gtcttgggta ttgcttcata
                                                                  1440
gcagtttgat aatgaatgaa tac
                                                                  1463·
```

```
<210> 4901
<211> 1330
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (200)...(633)
<223> similar to gi2996196 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4901
cttctcacca ccaccctcta gcagctccct cactggagag gcggccatca gccgcagctt 60
ccagagtctg gcatgttccc cgggcctccc cgctgctgac cgcctgtcct actcaggccg 120
ccctggaagc cgacaggccg gcctcggcg cgctggcgac tcggcggtgc tggtgctgcc 180
gccttccccg ggccctcgtt cctccaggcc cagcatggac tcggaagggg gaagcctcct 240
cctggacgag gactcggaag tcttcaagat gctgcaggaa aatcgcgagg gacgggcggc 300
cccccgacag tccagctcct tccggctctt gcaggaagcc ctggaggctg aggagagagg 360
```

```
tggcacgeca gccttcttgc ccagctcact gagcccccag tcctccctgc ccgcctccag
                                                                      420
ggccctggcc acccctccca agctccacac ttgtgagaag tgcagtacca gcatcgcgaa
                                                                      480
ccaggctgtg cgcatccagg agggccggta ccgccacccc ggctgctaca cctgtgccga
                                                                      540
ctgtgggctg aacctgaaga tgcgcgggca cttctgggtg ggtgacgagc tgtactgtga
                                                                      600
gaagcatgcc cgccagcgct actccgcacc tgccaccctc agctctcggg cctgagcccg
                                                                      660
ccatgccctc agcctgcctc actgctgggc cagggtcatg cctatataag ttggcatggc
                                                                      720
agggacaatg gtgggcagtt gctcttacat gagctaagtt tggagacctg aggccccttt
                                                                      780
gtcctcgctg ggtgggccaa ggtctgggac ctgtcttgga ctgtgggaga ctcacctca
                                                                      840
ccttgccagg cctctcccct gcaggactgg cattgcacta gtctgaggtg gccactgcct
                                                                      900
ttgatcaacc tttgtgtgcg agggtctaag tagggtcgaa cacagaagtg ggaaggagag
                                                                      960
gggtgggcca ggggctaatg gtgtcactgt gtaaagtttt tgacatacta gctctataaa
                                                                     1020
tatatgaata tggacaaaaa aaaaaaaaag ggggggccgt tttaaaggat ccttgggggg
                                                                     1080
gccaaagttt acgcgggctt gcaacgtcat agttttttcc ttatagggag tcgaattata
                                                                     1140
acctacctgg gaatttttgg aaaggaccct tatttttggg gggggacata ttgggacaaa
                                                                     1200
ctccctacag aaattaaagg ctttagggaa aatataaaat tttaaagggt ataaggggta
                                                                     1260
aaacaacctg catatgctgg ctgtttgaaa gttttgctaa cggagtttga tttatgaaaa
                                                                     1320
ttttatcccg
                                                                    1330
```

```
<210> 4902
<211> 738
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (15)...(372)
<223> similar to gi2232174 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4902
ggaattegge ggeegacetg gecatetttg ceetttgggg geteaageee gtggtetace
                                                                       60
tgctggccag ctccttcctg ggcctgggcc tgcaccccat ctcgggccac ttcgtggccg
                                                                      120
agcactacat gttcctcaag ggccacgaga cctactccta ctatgggcct ctcaactgga
                                                                      180
teacetteaa tgtgggetae eacgtggage accaegaett eeccageate eegggetaea
                                                                      240
acctgccgct ggtgcggaag atcgcgcccg agtactacga ccacctgccg cagcaccact
                                                                      300
cctgggtgaa ggtgctctgg gattttgtgt ttgaggactc cctggggccc tatgccaggg
                                                                      360
tgaagcgggt gtacaggctg gcaaaagatg gtctgtgagc ccgggctgcc tcctggtggt
                                                                      420
ggccattgtc ccccatcggc ccctcagcct tgcaccccag cactgagaag ctacatttcc
                                                                      480
tteetgtget etggaetget geeettgtee eegaggagtg teeegegeag ceacacetgg
                                                                      540
caacagcagt gtgggctgca gggctccgtc tgcacgtgga cttgccctgg accttgagtg
                                                                      600
tggccctccc tttctgggcc tccccaggtg aggcctggcc ctgccccacc atgacctggg
                                                                      660
tgctctgagc ccacggttcc cacggagctg acttctccgg ggtgcctgtg ccctacatta
                                                                      720
aacccggcgt ttgtttca
                                                                      738
```

```
<210> 4903 <211> 2299
```

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (196)...(1235)
<223> similar to gi5596646 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4903
agcatggagg ggcttgcctc tgttcatatc tcttgcctct gttcatttct tttgggtccc
                                                                       60
ctttcctcct tttccctcca tcccactgta agcaatttag tgggattcag tcattaaaag
                                                                      120
                                                                      180
ggtattaggc tgaaatgtgc aagcgctgcc caagcccagg gtggttctca caggatcccc
actgtccctg tcccccagga accaaacgcc aacagtgtag cttggaacac ccagtgtgag
                                                                      240
gacatgetet getteteggg aggaggetae etcaacatea aagecageae etteeetgtg
                                                                      300
                                                                      360
caccggcaga agetgcaggg ctttgtggtc ggctacaatg gctccaagat cttctgcctc
catgtettet ccatttetge egtggaggtg cegeagteeg eteccatgta ccagtacetg
                                                                      420
gataggaaac tgttcaagga agcctaccag attgcttgct tgggtgtcac agacactgat
                                                                      480
                                                                      540
tggcgtgaac tggccatgga agcgctagaa ggtttagatt ttgaaacagc aaagaaggag
                                                                      600
aggaagaagc ggggagagac caacaatgac ctgtttctgg cagatgtgtt ttcctaccag
                                                                      660
gggaagttcc atgaggccgc caaactgtac aagaggagtg ggcacgagaa cctcgcgctt
                                                                      720
gaaatgtaca ccgacctctg catgtttgag tatgccaagg atttccttgg atctggagac
                                                                      780
cccaaagaaa caaagatgct aatcaccaaa caggctgact gggccagaaa tatcaaggag
cccaaagccg ccgtggagat gtacatctca gcaggagagc acgtcaaggc catcgagatc
                                                                      840
tgtggtgacc atggctgggt tgacatgttg atcgacatcg cccgcaaact ggacaaggct
                                                                      900
                                                                      960
gagegegage ceetgetget gtgegetace taceteaaga agetggacag ceetggetat
gctgctgaga cctacctgaa gatgggtgac ctcaagtccc tggtgcagct gcacgtggag
                                                                     1020
acccageget gggatgagge etttgetttg ggtgagaage atcetgagtt taaggatgae
                                                                     1080
                                                                     1140
atctacatgo ogtatgotca gtggotagoa gagaacgato gotttgagga agoccagaaa
                                                                     1200
gegttecaca aggetgggeg acagagagaa geggtecagg tgetggagea geteacaaac
                                                                     1260
aatgeegtgg eggagageag gtttaatgat getgeetatt attactggat getgteeatg
                                                                     1320
cagtgcctcg atatagctca agatcctgcc cagaaggaca caatgcttgg caagttctac
cacttccagc gtttggcaga gctgtaccat ggttaccatg ccatccatcg ccacacggaa
                                                                     1380
gateegttea gtgteeateg teetgaaaet etttteaaea teteeaggtt eetgetgeae
                                                                     1440
agcetgeeca aggaeaceee etegggeate tetaaagtga aaataetett eacettggee
                                                                     1500
aagcagagca aggccctcgg tgcctacagg ctggcccggc acgcctatga caagctgcgt
                                                                     1560
ggcctgtaca tccctgccag attccaaaag tccattgagc tgggtaccct gaccatccgc
                                                                     1620
gccaagccct tccacgacag tgaggagttg gtgcccttgt gctaccgctg ctccaccaac
                                                                     1680
aacccgctgc tcaacaacct gggcaacgtc tgcatcaact gccgccagcc cttcatcttc
                                                                     1740
teegeetett eetaegaegt getaeaeetg gitgagtiet aeetggagga agggateaet
                                                                     1800
gatgaagaag ccatctccct catcgacctg gaggtgctga gacccaagcg ggatgacaga
                                                                     1860
cagctagaga ttgcaaacaa cagctcccag attctgcggc tagtggagac caaggactcc
                                                                     1920
atcggagatg aggacccgtt cacagctaag ctgagctttg agcaaggtgg ctcagagttc
                                                                     1980
gtgccagtgg tggtgagccg gctggtgctg cgctccatga gccgccggga tgtcctcatc
                                                                     2040
aagcgatggc ccccaccct gaggtggcaa tacttccgct cactgctgcc tgacgcctcc
                                                                     2100
attaccatgt gececteetg ettecagatg ttecattetg aggaetatga gttgetggtg
                                                                     2160
cttcagcatg getgetgeec ctactgeege aggtgeaagg atgaceetgg eccatgacea
                                                                     2220
gcatcetggg gacggcetge accetetgee egeettgggg tetgetggge tgtgaaggag
                                                                     2280
aataaagagt taaactgtc
                                                                     2299
```

```
<210> 4904
<211> 1083
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1007)...(458)
<223> similar to gi201910 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

### <400> 4904 tttttttttg gagttcataa aatcttttcc gagccagcgg tatgcagcca gagctccaaa 60 gttcaaaggc attgccgttg ggttcaagtg cccccaagg ctgttgctca gtcacagctt 120 ccagagette etteccacca caetgecagg agetgecaga gececcatge ageceetgae 180 eccagttece teccaagtee cagggeetga ecctggatat etggggeaag gtgeteggga 240 catagataag tgaaatggtg tgcagaggcc cagtggagag tcacatctcg gtctcagcca 300 acagactgtc ccctagtcct gacgtcatta gcaccatctg agagctggga tcgctggggc 360 acatecagga getgetgeet etetggtggg cageaggete eegeeetete teecatteet 420 tggtggttgg cagcccctcc tgccacttcc tcctcctcct ctccctcaga gaggaggtca 480 cagatetgtt getgeagete tgggetaatg etgtteteag ecaacaceag geteegeaaa 540 getgtggggt aattttetae catgteeage agggtetgag etgaetggtt ggtgageeet 600 gtgccctcca agtctaggac ctctagggta cgactagagg ccacagctac agccagcatt 660 cctgccacat ggtcacccag ggggttgtaa tccagattga ggacgcggac ctgggagctg 720 tgggccacgg caatggcaag gcggctccag cccttagggg tgatgccagg gttggcactc 780 agcgttaget cetteaagee agatttggee ceatetgggg geaggaggee acagatgagg 840 ttgatggett catcacccag catgcagtec eccaggteca gagccacgag ggcagggtgg 900 agggccaggg ctgggttcag caaggccagc cccgcatctg tcagggggct cccatgcagg 960 aagagggact ggatggagcg gttggtccgc agagcctcag ccagctgctt gatgcggctg 1020 gggctggaca cgacgcccag gttaaggttg aggaattcca ccgctctgca aatgatctca 1080 att 1083

```
<210> 4905
<211> 2723
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2518)...(2261)
<223> similar to gi5410249 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4905

ccactatatt tgtaaaagtt atgtgattgt atgactacag ctcttctgtg gtacctacag 60
gttgatacaa atcattaaaa atcaaaacat caacgtatct aagaaccaaa tggtgcatgt 120
gactccccgg agaaggatat atatgccatg ttgccacttg aaggagaatc ttccaggcat 180
```

```
caaatcccgt ggattctctt attttctttc acattccctc tgcttttcct cacagtcggc
                                                                      240
taccacgete tgaggagece egtgecatet ceattteece catecetttt teaetttgee
                                                                      300
tcacaccagt caaatccaaa tatccgagag tcagacactg ggagactgtc tgcttcttgg
                                                                      360
gcaactccca ggtggttatg atacgcttcc cggaccgcaa cactgaccta cggaactgaa
                                                                      420
atgatgaatt catgtcagaa gaaataggat ttggggaaga attcattacc tggaccattt
                                                                      480
tcagcagctg gaataaaaag tacttaacaa caacaacaaa aatcacacac aaagtccaaa
                                                                      540
                                                                      600
aagtgttttg aaaaagtgct ttgagaattt actgtacagt ttttttaaac aatttattta
tatgttggct tctacatgct cttacattcg tgtaaaacat ttatacatat tctttacaat
                                                                      660
                                                                      720
ttgtacatat attaaatggc tatagcataa acattgttct atgggatttt atagaagaaa
                                                                      780
aatcaagtgg ggagaattac ttatgaaaca ttaacaaaaa cccgtgatat tgaagaacaa
gatgttetea tatteatttg attteateta ettatttttg gtgteatttt attgatgetg
                                                                      840
gcccagactt tccatttccc gtaattatta ggtcagaaaa atgaaagcag cgggagggaa
                                                                      900
                                                                      960
cgcggtaagg cacctgtggg agacgggagc gctcctccgc aggggtgaga cggtggctgc
cagtgttgag ttcgagctga cggtgtgcca aggtcctgtt ttgctttatg ccgttaagtg
                                                                     1020
aagcgctgga agtgctggtg ctcagaaaca ccctgtgtga agtttcggat gtagtcagga
                                                                     1080
agggcgctgg tctgttcttt ctctccaacc tcagagcgcc ggggactctg tacactgctg
                                                                     1140
aggetgeage cetteteagt cectacaett ttecatetaa tggggageta acetgtgett
                                                                     1200
tttctctttg ctgatgacac caactggcca tgaacccgcc acccaagcca agcagtgtgc
                                                                     1260
cgtggccaca gcagcgcttc tcatcacggt ggatgaggag ccaaagaata agaaagggcc
                                                                     1320
agagacgceg gggtgctggg tgccctcctt cccccaggcc ctcccgaaca caggcctccg /
                                                                     1380
cacagocact caccogttgg accaaagcca caaaattctc tacaaagtcc ctcaattctt
                                                                     1440
ctaatgtatt cttcatggca taaaacatgc cttaaccaag attaggaagg aagtgcaaag
                                                                     1500
agagaaagca ctggtcctca cataagagca gcacatcaga aatgtcgctg aggacatggg
                                                                     1560
tggccagggg tatctgctca tctgccccag gcctgtgggg tcccccctgg agggacatgg
                                                                     1620
ggatggcccc acctggccca cacacccacg atgggcacta gcagccccca ggggcccccc
                                                                     1680
acceptence contetteaa gtgtaagear ttgaagetgt gaactgtggc agtgaaaggc
                                                                     1740
gtaacgactt ccctcaatga caggagcccc agaggactga aaggagttat aaaaatatac
                                                                     1800
aaacatagat attttttatt ctggcatagt tcatgttttt aagaaagtaa ttagtaatta
                                                                     1860°
attatctgac actgggtaag aactggaaga ttgtgggaga cttataaatt atataagact
                                                                     1920
tataatttat aagacatata aattatgact ctatgtaaaa tatcagtggg gagaaacccc
                                                                     1980
tcattttcca ttgaaaattc tggtaacttt taagtacttt ccaaaaatag agacaatttc
                                                                     2040
cactggttta aataatggat gcggaaatga acaaaagacc atccctaaat aactgacgca
                                                                     2100
tttagggtgg ctaataaaat aaatgcagtt ttttgcaact ctttctttt ggttttgttt
                                                                     2160
cctttttttt ctgaataata ggggaaaaaa agttttgaat tgcattgccc caagtcagga
                                                                     2220
gaaagcacgc ggcattctct tcaaggcccg ttctgtccta catcactgga aagcggctga
                                                                     2280
gggcctgcct cagcttttct gcaatcgttt cgtaaaattg cacttgctgc tccaggtaca
                                                                     2340
ggcggatgac actgttgtaa tcatagatcc ggttactgtg aaagtgattc atctcagctt
                                                                     2400
gcaacgcgta agacatgatg ctgactctct tcaccatgtt ctgtttgtct tgtagggtga
                                                                     2460
ttttacttgt tgcaactagt ttgtcacttt ctttcacttt ttctattgct ccctgtgaaa
                                                                     2520
tataaaatgc agcagtatga ataaagctga aatgattagt cattagttta aaatataaca
                                                                     2580
atgctaatat attctataac tgatttgctg ctgaacagga aatacctcca caaaataaga
                                                                     2640
agagaggaaa gcatctaaat ttaacttcct tcaagtccct ggaagcaaaa ggtgaattcc
                                                                     2700
tccgctaggg catcgaactc gag
                                                                     2723
```

```
<210> 4906
<211> 2693
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (664)...(1218)
<223> similar to gi1710175 in the genepept database release 114,
```

```
<400> 4906
geggeegegg getgeatggg cagegeeege geeeegeege tgageegteg eggageegeg
                                                                       60
cagccctcgg agcacgcccg tgcagcctgc caggactctt ccagacacgg gatttgtcgg
                                                                      120
tgaacaacgc agagctgatg cagacataat atatacagcc ctgcacctgg gacacacttc
                                                                      180
cattggattt aaaagacagt cetegteage actgaettte agetatggaa tegeagaegg
                                                                      240
ttgatgatga agcgccggcc gtgtaaatga agatcgagtg aggagcagga cgatgcccaa
                                                                      300
gggtagggtg cccttaaagc cccccaacaa ggaagagctt tcccctcagc agcgaccatg
                                                                      360
gtggagaacc agcctgggaa aaaagataaa gataaagttt ctctaaccaa gaccccaaaa
                                                                      420
ctggagcgtg gcgatggcgg gaaggaggtg agggagcgag ccagcaagcg gaagctgccc
                                                                      480
ttcaccgcgg gcgccaatgg ggagcagaag gactcggaca cagagaagca gggccctgag
                                                                      540
cggaagagga ttaagaagga gcctgtcacc cggaaggccg ggctgctgtt tggcatgggg
                                                                      600
etgtetggaa teegageegg etaceeete teegagegee ageaggtgge eetteteatg
                                                                      660
cagatgacgg ccgaggagtc tgccaacagc ccagtggaca caacaccaaa gcaccctcc
                                                                      720
cagtctacag tgtgtcagaa gggaacgccc aactctgcct caaaaaccaa agataaagtg
                                                                      780
aacaagagaa acgagcgtgg agagacccgc ctgcaccgag ccgccatccg cggggacgcc
                                                                      840
cggcgcatca aagagctcat cagcgagggg gcagacgtca acgtcaagga cttcgcaggc
                                                                      900
tggacggcgc tgcacgaggc ctgtaaccgg ggctactacg acgtcgcgaa gcagctgctg
                                                                      960
getgeaggtg eggaggtgaa caccaaggge etagatgaeg acaegeettt geacgaeget
                                                                     1020
gccaacaacg ggcactacaa ggtggtgaag ctgctgctgc ggtacggagg gaacccgcag
                                                                     1080
cagagcaaca ggaaaggcga gacgccgctg aaagtggcca actcccccac gatggtgaac
                                                                     1140
etectgttag geaaaggeae ttacaettee agegaggaga getegaegga gageteagaa
                                                                     1200
gaggaagacg caccatcctt cgcaccttcc agttcagtcg acggcaacaa cacggactcc
                                                                     1260
gagttegaaa aaggeeteaa ageacaagge ecaagaacee agageeacag aaggeeacgg
                                                                     1320
cccccgtcaa ggacgagtat gagtttgatg aggacgacga gcaggacagg gttcctccgg
                                                                     1380
tggacgacaa gcacctattg aaaaaggact acagaaaaga aacgaaatcc aatagtttta
                                                                     1440
tctctatacc caaaatggag gttaaaagtt acactaaaaa taacacgatt gcaccaaaga
                                                                     1500
aagcgtccca tcgtatcctg tcagacacgt cggacgagga ggacgcgagt gtcaccgtgg
                                                                     1560
ggacaggaga gaagctgaga ctctcggcac atacgatatt gcctggtagt aagacacgag
                                                                     1620
agccttctaa tgccaagcag cagaaggaaa aaaataaagt gaaaaagaag cgaaagaaag
                                                                     1680
aaacaaaagg cagagaggtt cgcttcggaa agcggagcga caagttctgc tcctcggagt
                                                                     1740
cggagagcga gtcctcagag agtggggagg atgacaggga ctctctgggg agctctggct
                                                                     1800
gcctcaaggg gtccccgctg gtgctgaagg acccctccct gttcagctcc ctctctgcct
                                                                     1860
cetecacete gteteaeggg agetetgeeg eccagaagea gaaceceage cacacagace
                                                                     1920
agcacaccaa gcactggcgg acagacaatt ggaaaaccat ttcttccccg gcttggtcag
                                                                     1980
aggtcagttc tttatcagac tccacaagga cgagactgac aagcgagtct gactactcct
                                                                     2040
ctgagggctc cagtgtggaa tcgctgaagc cagtgaggaa gaggcaggag cacaggaagc
                                                                     2100
gageeteect gteggagaag aagageeeet teetgteeag egeggaggge getgteeeea
                                                                     2160
aactggacaa ggaggggaaa gttgtcaaaa aacataaaac aaaacacaaa cacaaaaaca
                                                                     2220
aggagaaggg acagtgttcc atcagccaag agctgaagtt gaaaagtttt acttacgaat
                                                                     2280
atgaggactc caagcagaag tcagataagg ctatactgtt agagaatgat ctttccactg
                                                                     2340
aaaacaagct aaaagtgtta aagcacgatc gcgaccactt taaaaaagaa gagaaactta
                                                                     2400
gcaaaatgaa attagaagaa aaagaatggc tctttaaaga tgaaaaatca ctgaagagaa
                                                                     2460
tcaaagacac aaacaaagac atcagcaggt ctttccgaga agagaaagac cgttcgaata
                                                                     2520
aagcagaaaa ggagagatcg ctgaaggaaa agtctccgaa agaagaaaaa ctgagactgt
                                                                     2580
acaaagagga gagaaagaag aaatcaaaag accggccctc aaaattagag aagaagaatg
                                                                     2640
atttaaaaga ggacaaaatt tcaaaagaga aggagaagat ttttaaagaa gat
                                                                     2693
```

```
<211> 1283
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1248)...(982)
<223> similar to gil872200 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
' <400> 4907
tttcgtcgca gaggcgcggc ggctgtacaa ctcggccgtt gtcaccatgc cggtcgtccg
                                                                       60
gaagatttte egtegeegee ggggegaete ggagteagag gaagatgage aggaeteaga
                                                                      120
ggaggttcga ttaaaactgg aagagaccag agaagtacag aacttgagga agaggcccaa
                                                                      180
eggggtgagt getgtggeet tgetggtggg agagaaggta caagaggaga ccactctagt
                                                                      240
ggatgatece tttcagatga agacaggtgg tatggtggat atgaagaaac tgaaggaaag
                                                                      300
gggcaaagat aagatcagtg aggaggagga cetgeacetg gggacategt tttetgeaga
                                                                      360
aaccaaccga agggatgagg atgcagacat gatgaagtac attgagacag agctaaagaa
                                                                      420
gaggaaaggg atcgtggaac atgaggaaca gaaagttaag ccaaagaatg cagaggactg
                                                                      480
tetttatgaa etteeagaaa acateegtgt tteeteagea aagaagaeeg aggagatget
                                                                      540
ttccaaccag atgctgagtg gcattcctga ggtggacctg ggcatcgatg ctaaaataaa
                                                                      600
aaatatcatt tccacggagg atgccaaggc ccgtctgctg gcagagcagc agaacaagaa
                                                                      660
gaaagacage gagaceteet tegtgeetae caacatgget gtgaattatg tgeageacaa
                                                                      720
cagattttat catgaggagc tcaacgcgcc catacggaga aacaaagaag agcccaaggc
                                                                      780
ceggecettg agagtaggtg acaeggagaa gecagageet gageggteee etectaaceg
                                                                      840
caagcgtcct gctaacgaga aggcaactga tgactatcat tatgagaagt tcaagaaaat
                                                                      900
gaataggcgg tactgagttg tgcagagtgg gatgtaaata tcgccttcct ctccctatat
                                                                      960
eceteceatg aaaaatgget teetggeegg gegtggtgge teetgeetgt aateecagea
                                                                     1020
ctttgggagg ccgaggtggg cggatcacct gaggtcggga gtttgagacc agcctgacca
                                                                     1080
acatggagaa acccagtoto tactgaaaat acagaaaagt tagccaggog tggtggcaca
                                                                     1140
tgcctgtaat cccagctgct caggaggctg aggcaggaga attgcttgaa cccaaggggc
                                                                     1200
ggaggttgtg gtgagccgag attgcacctt tgtactccag cctgggcaac gagcaaaaa
                                                                     1260
ctctgtctca aagaaaaaaa aaa
                                                                     1283
```

```
<211> 4159
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (4160)...(1309)
<223> similar to gi5725506 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 4908

```
<400> 4908
tttttttttt ttccaaaagt gttcttttag tttctaggta acatatagtt gtataaatac
```

```
tctattttta tatgcacttc cacaaaagcg atataattaa aaagtttttt tcattagaaa
                                                                     120
taaatgtata aaaataaata tgttattata ggcatttatt actaactata gtccttcttg
                                                                     180
gaaggaacac ccaaaccaat acttataaag tacatgtaat ttatagtaac atattttact
                                                                     240
atatacatat ggaaaaaatc atattctcac agaagagctg aacagacatt caccaggata
                                                                     300
cgactgttgg accagctgct ggagatggac ctgctacccc tcagcagcct ccccaccaca
                                                                     360
agacaagtga teteaatgte eccaaacetg tgggaceetg ttetacacae etcatttttg
                                                                     420
ttccggcgtt tcatcctcct tgtgtgattg tactgatttt catgagacac aagttacttc
                                                                     480
tttacatcca tattcccaaa gcagggttac atggtaggaa agaaaggaag ttggaggtac
                                                                     540
taageteatt gtgteteete tagettttae eageatetaa tgetteaetg ettttttee
                                                                     600
attgtagact ttaatgcact tgaataaata catggagttg ttttttcctc aaaatgaatt
                                                                     660
                                                                     720
acacaaataa agactgagat ggtccaaaaa aggaaagagg aagccatttg cgttatttca
cgttgctgag cctttctctc atgttgaaca atctgaagtt ttaattctcg gtagaaataa
                                                                     780
tgtataaaca ttctctgaaa ccatagcagc cataaacagt gctggtcaaa gatcctattt
                                                                     840
900
acttttctcc tacttttcat ttcccaaccc ccatgatact aagtatttga taagtaccag
                                                                     960
gaaacagggg ttgtaatagt tctaactttt tttgacaatt gctttgtttt ttctaaactt
                                                                    1020
gtaatagatg taacaaaaga aataataata ataatgcccg gggctttatt atgctatatc
                                                                    1080
actgctcaga ggttaataat cctcactaac tatcctatca aatttgcaac tggcagttta
                                                                    1140
ctctgatgat tcaactcctt ttctatctac ccccataatc ccaccttact gatacacctc
                                                                    1200
actggttact ggcaagatac gctggatccc tccagccttc ttgctttccc tgcaccagcc
                                                                    1260
cttcctcact ttgccttgcc ctcaaagcta acaccactta aaccacttaa ctgcattctg
                                                                    1320
ccattgtgca aaagtctatg aaatgtttag gtttctttaa aggatcacag ctctcatgag
                                                                    1380
ataacacccc tocatcatgg gacagacact tcaagcttct ttttttgtaa cccttcccac
                                                                    1440
aggtettaga acatgatgae caeteeecca getgeeactg ggggeaggga tggtetgeae
                                                                    1500
aaggtetggt getggetgge tteactteet ttgeacacte ggaageagge tgtecattaa
                                                                    1560
tgtctcggca ttctaccagt cttctctgcc aacccaattc acatgactta gaacattcgc
                                                                    1620
eccaetette aatgaceeat getgaaaaag tggggatage attgaaagat teettettet
                                                                    1680
tetttaegaa gtaggtgtat ttaattttag gtegaaggge attgeeeaca gtaagaacet
                                                                    1740
ggatggtcaa gggctctttg agagggctaa agctgcgaat tctttccaat gccgcagagg
                                                                    1800
ageogetgta ceteaagaca acacettigt acataatgte tigetetaag giggacaaag
                                                                    1860.
tgtagtcacc attaagaata tatgtgccat cagcagcttt gatggcaaga aagctgccat
                                                                    1920
tgttcctgga teceetetgg tteegetgtt teaettegat gttggtgget eeagttggaa
                                                                    1980
ttgtgatgat atcatgatat ccaggttttg cactagtaac tgatcctgat atttttttac
                                                                   2040
aagtagatee attteeeeeg caaacaeeae atttateaaa ettetttttg gagtetatga
                                                                    2100
tgcgatcaca accagetttt acacaetgte ettgcacaca gacagaggtg gaatetggge
                                                                    2160
tacatggagt accatctaca accttgggct gcaaaacgaa gaagtagcca atgcctttgg
                                                                    2220
cttggcagat gagcttgcac ctgtcctttg gtgagacgcc agcgtacttg ggaatccatt
                                                                    2280
ccaccgcagg cccactccca aaggaagctt ttgaaaactc gttgtgtgct tcacattgtt
                                                                    2340
cetetetaaa ggttttteea ttattgtetg gacagteete aaggttacag gatetgtage
                                                                    2400
gcactcgttt gccttcacag tacttccctc cattctttgg gactgggttg tcacattccc
                                                                    2460
tcatcgtgta ctggactcct ccaccgcacg ttctcgaaca gtctccccaa ggcccccaca
                                                                    2520
ttccccagct tccatgaaaa ggcgtatcaa aatgctttct gtcggttttg ttcacacact
                                                                    2580
tgccgttgat acaccatttc ccttctccac agctggtgcc atccgcccac gggaagtgtt
                                                                    2640
tggtttgaca caccagcacc ccaccagagg tgccggtaca ccacaaggtg ctacatgtgc
                                                                    2700
tggctgcatc agggcagtgt ttggagtcct ccccaaatgt aaactggcac tgccggttgg
                                                                    2760
categtaega ggtgecaggg agategeetg ggagetgtat gggattetga ggettgteca
                                                                    2820
tcaaacattc cccatgacca ttatccagaa atgatgtaat catgtaggca ctgcaaggag
                                                                    2880
accaaggetg getgtggtee aggttggaaa geattgaege catcatgtgg gaateetggt
                                                                    2940
tcacaccatt aaggctggca cactgctttg catcatcatg tggcatgtta aacacgtggc
                                                                    3000
ctaattcatg ggctgtggtg aaggcagctt gtaaaccatc atcttctatg acggagcagc
                                                                    3060
ttctgctcgg atcacacaca gttccaacat cagccatccc aagagtatca catgtctggg
                                                                    3120
acccacacaa gtcctgtctg gtgaaaagaa ttgctgtgtc atagtgctct gcatcccggt
                                                                    3180
cactgggtgg gttgtgctgc ttctgccagt tgcaaaagtt ccgcagagtg agggcagcat
                                                                    3240
tggaggtcac ttccggcccc ttctgttcat cgtggatgac caagatcttc accaccacca
                                                                    3300
ggctaactga attacgaatg ctggggtgtt tgtacaatct ggctgccacc gaaaacaacg
                                                                    3360
tgagaaggta atgetttaga ceaetgeegt ggaattetge categaetgg tetgecaeaa
                                                                    3420
gcatggtttc cacatagcgg tgactggaca caaatcgctt ctttcttatg cttccagttc
                                                                    3480
```

```
3540
etgtgggetg teetaegeet tgeagtgeeg ggteetgegg egaeeaetga ggeeettegt
cetegecete agtecetteg tectegtett eggteteege titteecagte ggeegggget
                                                                     3600
cgtcgtccac gaccccgcac gtgccgccta cgtcgccctg ccgattccgc cgcaggaggt
                                                                     3660
ggaactgtag tggtgccggc ggcttctccc ctggggcggc ggtggcgagg cgctcgctgg
                                                                     3720
cggcgggcag cggctggatg aaatacgcct ccccagcag gtagaaggcg ccgcgcacgc
                                                                     3780
cetegeagag getgagggeg geageegage tgggategee atteaeggtg ceggagtaga
                                                                     3840
ageagtgege caggteggtt teeggaageg gegtetegga ceeggatttg egeeceaegt
                                                                     3900
tetggagegt gaageeggge gecaaaaage tgetgteggg eegeagetee agateeaget
                                                                     3960
getggteaaa ggegtgeagg eggaggegeg tggteeegtg teeeggggeg egeteeaget
                                                                     4020
ccggcaccac tagctcctcg tcctcctcgg aggggggccc gagtgcgtcc gacacggcca
                                                                     4080
gtagegeege ggegageage ageagegtgg gtaegggeee aaageteega gaeeeeggag
                                                                     4140
cccgctccgc gttccccat
                                                                     4159
```

```
<210> 4909
<211> 1816
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1817)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (8)...(1038)
<223> similar to gi5565866 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4909 tegtggaatt aacattgetg ceateactga ateagacaag ttetteatea aeggeteeaa 60 ctgggaatgc atcctggggc tggcctatgc tgagattgcc aggcctgacg actccctgga 120 geetttettt gaetetetgg taaageagae eeaegtteee aacetettet eeetgeaget 180 ttgtggtgct ggcttccccc tcaaccagtc tgaagtgctg gcctctgtcg gagggagcat 240 gatcattgga ggtatcgacc actcgctgta cacaggcagt ctctggtata cacccatccg 300 gcgggagtgg tattatgagg tcatcattgt gcgggtggag atcaatggac aggatctgaa 360 aatggactgc aaggagtaca actatgacaa gagcattgtg gacagtggca ccaccaacct 420 tcgtttgccc aagaaagtgt ttgaagctgc agtcaaatcc atcaaggcag cctcctccac 480 ggagaagttc'cctgatggtt tctggctagg agagcagctg gtgtgctggc aagcaggcac 540 caccccttgg aacattttcc cagtcatctc actctaccta atgggtgagg ttaccaacca 600 gteetteege ateaceatee tteegeagea atacetgegg ceagtggaag atgtggeeae 660. gtcccaagac gactgttaca agtttgccat ctcacagtca tccacgggca ctgttatggg 720 agetgttate atggaggget tetaegttgt etttgategg geeegaaaac gaattggett 780 tgctgtcagc gcttgccatg tgcacgatga gttcaggacg gcagcggcgg aaggcccttt 840 tgtcaccttg gacatggaag actgtggcta caacattcca cagacagatg agtcaaccct 900 catgaccata geetatgtea tggetgeeat etgegeeete tteatgetge caetetgeet 960 catggtgtgt cagtggcgct gcctccgctg cctgcgccag cagcatgatg actttgctga 1020 tgacatetee etgetgaagt gaggaggeee atgggeagaa gatagagatt eeeetggace 1080 acacctccgt ggttcacttt ggtcacaagt aggagacaca gatggcacct gtggccagag 1140 cacctcagga ccctccccac ccaccaaatg cctctgcctt gatggagaag gaaaaggctg 1200

```
gcaaggtggg ttccagggac tgtacctgta ggaaacagaa aagagaagaa agaagcactc
                                                                    1260
tgctggcggg aatactcttg gtcacctcaa atttaagtcg ggaaattctg ctgcttgaaa
                                                                    1320
cttcagccct gaacctttgt ccaccattcc tttaaattct ccaacccaaa gtattcttct
                                                                    1380
tttcttagtt tcagaagtac tggcatcaca cgcaggttac cttggcgtgt gtccctgtgg
                                                                    1440
taccctggca gagaagagac caagcttgtt tccctgctgg ccaaagtcag taggagagga
                                                                    1500
tgcacagttt gctattttgc ttttaggagg acaggggact gttattaaac aaggccttaa
                                                                    1560
cattgggtgg caaagatttg ccttntttgg attttaaaaa aaaaaactag attgactatt
                                                                    1620
tatacaaatg ggggcggctg gaaagaggag aaggagaggg agtacaaaga cagggaatag
                                                                    1680
tgggatcaaa gctagggaaa ggcagaaaca caaccactca ccagtcctta gtttttggac
                                                                    1740
cttcttctcc caaggttage cttcccttct tcaggaagnt ggggtgtttg tttttcattg
                                                                    1800
ttttttttt tctatt
                                                                    1816
```

```
<210> 4910
<211> 560
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (561)...(394)
<223> similar to gill84157 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4910
tttttttttg gaagttatga aagaggcttt taatgaaaat actgtacagt ttatgtgagg
                                                                60
caaaggcagg gggccttgtc caggaaggga agaggcccaa gaggcttcct gtccccttgg
                                                               120
gggcagcaga gccaaatget tgggctcggg cccaagctgc ctgccctgca ggggtccagg
                                                               180
gaggteetga tgagteetge ceetteeett ceagagggee tgeetggeag ceageageag
                                                               240
ggtgtttggg gagcacctgt tcccacacaa gggtcctttt agtccattcc aacaggtgac
                                                               300
teegageage cetgaagget tggggaggge teetgeetgg caagtgggee tggcaegagt
                                                               360
agagggcaga ggcccgccct gggtgaggaa catcatagcc aggcgccgcc gccgtgcgag
                                                               420
tagetgtget eetggeegge gaegaageee egeageaget eggeeteaee éceaaacaee
                                                               480
540
cctgaggagt ccagactgtc
                                                               560
```

```
<210> 4911
<211> 1468
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1188)...(779)
<223> similar to gi458726 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4911
ttttttttt tttgcactca tagttacagt ttattacagt gaaaggatac agattaaaat
                                                                       60
cagcaatgaa gaaaggcaca taaggtaagg tccaagagaa cttccaatta tcctctcctg
                                                                      120
gcagagtett caggataatg ettaattete ecagcaatga tgtgtggeta caatgatgtg
                                                                      180
tgcacagagt attaccaacc.agagtagetc acceatgeet aggtgtecag ggettttact
                                                                      240
agggattgat cacattggca tgcttcactg cccacatggc taacttagtc tcctcagctt
                                                                      300
gaccttgcaa ggtcaagctg atactgcatg gcccaaggcc cacaggtaaa caaaaacact
                                                                      360
cttatcaggc aagatattct aatggcttag aggttatctc ccaggagcca ggcaggggcc
                                                                      420
tattetttat ttggaatgte cagggtteaa acateecaag tteateetgt ateacacaaa
                                                                      480
aggattaact tcaaaagtgg tattettgge caggtgtggt ggeteacace tgtaateeca
                                                                      540
gcaccttggg aggctgaggt gggaggactg cttgagacca ggaattcgac accagcctgg
                                                                      600
gcaacctagt gagatcccat ctctatcgta atttttctaa aaagtggtat tcttaagtca
                                                                      660
agttactacc ctgattgatg acagggagag agaccaggaa acccctgtgt tgtaatccct.
                                                                      720
taggaaacct tacaccttta cttgctttat tatcaggtaa tttccaggat gtaagccata
                                                                      780
cagccagaag gcagggtaca aaggagagga ggcagagatg gtacactcat acagaagctt
                                                                      840
ctcctgattg tccactgaat agaaggcaag ctttccctcc tcaaggttca gccagatgcc
                                                                      900
caccacccca ggtctgtctg agccaaggac agtttccttg accatgtgcc atgcagagag
                                                                      960
ctggctagtc cccttccatt ccacacaaca agagtccata gtccttccca ggacctggtc
                                                                     1020
geggeteate teccaggaag ecaceecaac tgeccagtgg etgeaattee tagtgtecae
                                                                     1080
ttcccagtaa tgctttccag aagacagggc ctgggaacat aagacctggc tggtagaaaa
                                                                     1140
cctctcacag ctccagcgat agggttgtgg gcggtgagac acagtcactg tacgggaatc
                                                                     1200
cttggacacc tccaggctgc aggaaaggct cttcaagtta aaggttggat ggatggccc
                                                                     1260
tcagcaggtt taggaagagg cagttggcta tagttggtgg ccacagcaca gatgcagaaa
                                                                     1320
tacctcagca ggtttgggaa caggcagttg gctgtagttg gtggccacag cagagatgct
                                                                     1380
caaaggttgg cgggactctg agtgctcttg ggtctagagt ctcaacctgc tttgcctttg
                                                                     1440
ctcgtgccga attctgcagg cgggcaat
                                                                     1468
```

```
<210> 4912
<211> 2144
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1807)...(1484)
<223> similar to gi3947854 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4912
ttttttttt ttaaattaac cagatctgtc ttttaatagt taccagaatt tagatgttaa
                                                                      . 60
ttccccagag gaaaaatgtc catggcacag tttttctgga aaagttcaca tgtagacagt
                                                                      120
gaagettetg aagttaggeg teaaattagt agtgacaate tttttttaa tettgaaagt
                                                                      180
ccctagtttt aaagaaagta gaatccatct ggggcatgtc tgcatcacag ggtatcactc
                                                                      240
aagagtcatc atcaggccaa aaagactctg aagggaacca ggagggtttg gcccttgctg
                                                                      300
tggaaagatg ctactgaaag tataagagaa caccctaatg cacgcgtcag gcacgaaacc
                                                                      360
gtaccatgcc ccgctaagac atgggaccag agaacacgtc aacgtcaggc cgctccagga
                                                                      420
aaaccatcca caaagacaac agaagctaac ccgaggtcga cactgccatg aagagtgttg
                                                                      480
```

```
gctgaaaccg cagttaccag tgtctttact ggacgcgaac atccctaagg acacggctgt
                                                                    540
getgetteet aageataegt gaccaegata etgtetttee eegggtetee ttagegeeat
                                                                    600
cactgoacca ggoccagoat gootcaagto otocagagoo ttotoctgag acagoactag
                                                                    660
                                                                    720
gggccacgtc agaccccagg ctgcagccct tcaccgtgcc cgtccccggt ccggtctgcc
etgetgggge eggtgggtat catggggace cetgtgtaga caeggacace ggagagegtg
                                                                    780
ggacaggagg cgtctcagag ctccccaccc acacactcaa gggtcagcgt cactcatgtt
                                                                    840
                                                                    900
teettetgtt cecatggtge etceaaaagg gtttecaaae aaagteatea ttgattaeee
tggagtatgt caataagcca aacaccagca gccagatacc accaagctag tcaccacttt
                                                                    960
aaaagaagat gagetggaga aegaageage eetetgatgg acceagteag tgeagteggg
                                                                   1020
acteagggag acaeeegggg acceetgeee ageteeetge eggaggaaag actagggaag
                                                                   1080
1140
tetgggagea ggeegagaaa etetgttgag etgetaaaga attetteatt eteatgtgat
                                                                   1200
tttcttcatt tctgtcttcc cagttactac caaggagcta aggaaagttc aggaatactt
                                                                   1260
tgtttagtgt cgccataaca tctccaacca tgcattaagt ttaaccaaaa gctgcaatat
                                                                   1320
tccagattct taaattctca atggcaacca atttatgctc aagttgaaaa tctggcaagc
                                                                   1380
accgtacgcc ttcagcacac gcgtgggtcc ggattttccc atcacacac cgctctcccc
                                                                   1440
cgtccaaggt gcctgtttac ttctggtctg cgcgggctca ggtttcaaag agcttgctga
                                                                   1500
aggeggeece caceteggeg ateatgtegg aggtggtggt ggagegaeeg tgettetgga
                                                                   1560
aggettggtg gttgcaetge etggtgagag ageaggegee aaaegeggee aeeaggagag
                                                                   1620
ggctggacec atttgttttc tgtggtccag caaggagege ccagtgtacc aggacgecca
                                                                   1680
gggagcccga caggaggtcc ccttgccctc cacacctgcg gctgctgcct tcctggctgc
                                                                   1740
acacaagcac etgetggeeg ttggagagga tgtegegete teetttetgg accacegtea
                                                                  1800
egttgeecag ggettggetg agtettagea cagatecatg getgteateg etgteeatag
                                                                   1860
ggcctctgag ctatgacaac acaggaagac agagaaaaag caaagtcttc ctcagacaca
                                                                   1920
cgacgacaga tagccctgtc ccatccgcca tgagactcat gctctcgtgt ctaaagggat
                                                                   1980
cacccaggca cctgttaaag gccatgtagg tgggaggatg cccaggatat cacctgcagt
                                                                   2040
gagtcctccg agcaggtgct gacacggtgc ctgctccagt gcccatcctc tacctcatca
                                                                   2100
gagcaggctg aaggagggaa ttccaccacg ctggactaaa agaa
                                                                   2144
```

```
<210> 4913
<211> 2834
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(2504)
<223> similar to gil632819 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4913
ggcacgagag cagcaacggg cagatgtttc acgcccactg gttctgcgct gggacagaca
                                                                       60
cagtectegg ggecacgteg gaccetetgg agetgttett ggtggatgaa tgtgaggaca
                                                                      120
tgcagettte atatatecae agcaaagtga aagteateta eaaageeeee teegaaaaet
                                                                      180
gggccatgga gggaggcatg gatcccgagt ccctgctgga gggggacgac gggaagacct
                                                                      240
acttetacca getgtggtat gateaagaet acgegagatt egagteecet ecaaaaacce
                                                                      300
agccaacaga ggacaacaag ttcaaattct gtgtgagctg tgcccgtctg gctgagatga
                                                                      360
ggcaaaaaga aatccccagg gtcctggagc agctcgagga cctggatagc cgggtcctct
                                                                      420
actactcage caccaagaac ggcatcctgt accgagttgg tgatggtgtg tacctgcccc
                                                                      480
ctgaggcctt cacgttcaac atcaagctgt ccagtcccgt gaaacgccca cggaaggagc
                                                                      540
```

```
600
ccgtggatga ggacctgtac ccagagcact accggaaata ctccgactac atcaaaggca
gcaacctgga tgcccctgag ccctaccgaa ttggccggat caaagagatc ttctgtccca
                                                                      660
                                                                      720
aqaaqagcaa cggcaggccc aatgagactg acatcaaaat ccgggtcaac aagttctaca
                                                                      780
ggcctgagaa cacccacaag tccactccag cgagctacca cgcagacatc aacctgctct
                                                                      840
actggagcga cgaggaggcc gtggtggact tcaaggctgt gcagggccgc tgcaccgtgg
                                                                      900
agtatgggga ggacetgeee gagtgegtee aggtgtaete catgggegge eecaaceget
tctacttcct cgaggcctat aatgcaaaga gcaaaagctt tgaagatcct cccaaccatg
                                                                      960
                                                                     1020
cccqtagccc tggaaacaaa gggaagggca agggaaaagg gaagggcaag cccaagtccc
aageetgtga geegagegag eeagagatag agateaaget geecaagetg eggaceetgg
                                                                     1080
                                                                     1140
atgtgttttc tggctgcggg gggttgtcgg agggattcca ccaagcaggc atctctgaca
                                                                     1200
cgctgtgggc catcgagatg tgggaccctg cggcccaggc gttccggctg aacaaccccg
                                                                     1260
getecacagt gttcacagag gaetgcaaca teetgetgaa getggteatg getggggaga
                                                                     1320
ccaccaacte eegeggeeag eggetgeeee agaagggaga egtggagatg etgtgeggeg
                                                                     1380
ggccgccttg ccagggcttc agcggcatga accgcttcaa ttcgcgcacc tactccaagt
                                                                     1440
tcaaaaactc tctggtggtt tccttcctca gctactgcga ctactaccgg ccccggttct
                                                                     1500
tectectgga gaatgteagg aactttgtet cetteaageg etceatggte etgaagetea
                                                                     1560
coctocqctq cotgqtccqc atgggctatc agtgcacctt cggcgtgctg caggccggtc
agtacggcgt ggcccagact aggaggcggg ccatcatcct ggccgcggcc cctggagaga
                                                                     1620
agetecetet gtteeeggag ceaetgeaeg tgtttgetee eegggeetge eagetgageg
                                                                     1680
tggtggtgga tgacaagaag tttgtgagca acataaccag gttgagctcg ggtcctttcc
                                                                     1740
ggaccatcac ggtgcgagac acgatgtccg acctgccgga ggtgcggaat ggagcctcgg
                                                                     1800
                                                                     1860
cactggagat ctcctacaac ggggagcctc agtcctggtt ccagaggcag ctccggggcg
cacagtacca gcccatcete agggaccaca tetgtaagga catgagtgca ttggtggetg
                                                                     1920
cccgcatgcg gcacatcccc ttggccccag ggtcagactg gcgcgatctg cccaacatcg
                                                                     1980
                                                                     2040
aggtgcggct ctcagacggc accatggcca ggaagctgcg gtatacccac catgacagga
agaacggccg cagcagetet ggggccctcc gtggggtctg ctcctgcgtg gaagccggca
                                                                     2100
                                                                     2160
aageetgega ceeegeagee aggeagttea acaceeteat eecetggtge etgeeecaca
                                                                     2220
ccgggaaccg gcacaaccac tgggctggcc tctatggaag gctcgagtgg gacggcttct
                                                                     2280
teageacaac egteaceaac eeegageeca tgggcaagea gggcegegtg etecaceag
                                                                     2340
ageageaceg tgtggtgage gtgegggagt gtgeeegete ceagggette cetgacacet
                                                                     2400
accggctctt cggcaacatc ctggacaagc accggcaggt gggcaatgcc gtgccaccgc
                                                                     2460
ccctggccaa agccattggc ttggagatca agctttgtat gttggccaaa gcccgagaga
                                                                     2520
gtgcctcagc taaaataaag gaggaggaag ctgctaagga ctagttctgc cctcccgtca
                                                                     2580
cccctgtttc tggcaccagg aatccccaac atgcactgat gttgtgtttt taacatgtca
atctgtccgt tcacatgtgt ggtacatggt gtttgtggcc ttggctgaca tgaagctgtt
                                                                     2640
                                                                     2700
gtgtgaggtt cgcttatcaa ctaatgattt agtgatcaaa ttgtgcagta ctttgtgcat
                                                                     2760
tetggatttt aaaagttttt tattatgeat tatateaaat etaecaetgt atgagtggaa
                                                                     2820
attaagactt tatgtagttt ttatatgttg taatatttct tcaaataaat ctctcctata
                                                                     2834
aaccaaaaaa aaaa
```

```
<211> 1602
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(595)
<223> similar to gi3874039 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<210> 4914

```
<400> 4914
ctgcagaagt ggagtttgga gtatatccag gagatcgctg gctgccgaac tgtcccagtg
                                                                     60
                                                                    120
gaagttggtt cgaggtacac agatgaggaa tggtcccaga ccctcatgac ggtcaacgag
ttcatcagca aatacatcgt gaatgagcca agggacgtcg ggtaccttgc tcagcaccag
                                                                    180
etetttgace agateeegga gttgaageag gacateagea teeeegaeta etgeageetg
                                                                    240
                                                                    300
ggcgatgggg aggaggagga aatcaccatc aatgcctggt ttggtcccca gggaaccatc
tececactae ateaggatee ecageaaaae tteetagtge aggtgatggg gaggaagtae
                                                                    360
atcoggotgt attoccogca ggagtcaggg gototgtaco otcatgacac gcacottoto
                                                                    420
cataacacga gccaggttga cgtggagaat cccgacctgg aaaagttccc caagtttgcc
                                                                    480
                                                                    540
aaggeeeeat teetgteetg cateetgtet eetggagaga teetgtteat eeeggtgaaa
                                                                    600
tactggcatt acgtgcgggc tctggatttg agcttctcgg tcagcttctg gtggtcgtag
                                                                    660
ccaggatagg agctgaaagg gcctgacatg cagacagcat tcatctgttc actaatttcc
tgggtcctgg aatctataga gacaagcagg actgaacctg tgtcctgaag agccttcact
                                                                    720
geccagtgge agecetgggg ggetgagete cageactgga caggeacaga geaggggetg
                                                                    780
cccaggaagg agcacactcc aggccagggg tgcatggcag aggaaggtgg ggagagccca
                                                                    840
                                                                    900
gaaggacatt gcagacagac agcctgcatg gggactctgg catcagaaag ccgaatgttt
ttgggaaacg ggtgggtcac acaggcaggg gtgaaacatg ggctctgagg ttggctacct
                                                                    960
gattcaaacc cggccgcgct gcgcacctgc tgggtgactt ggccaggatc ccccacttcg
                                                                   1020
etgtgeceat atggaaaaga gggeaaggee agteeteact geegagggee gagaaggegg
                                                                   1080
tgeegageee etgetgetge atgaacetta geegetgtea etgateeeaa ttaetetgat
                                                                   1140
cettttgccc ttccttccca taacggcctg ctggacgcca cagcctgaat actggagaga
                                                                   1200
gctgggcatt gcccaggtca caggagagag tccgtagaga cctgcgcagg agccgggacc
                                                                   1260
cetgetgage agtgggaget ttetgteate eccatggete aaggataace tacetgeetg
                                                                   1320
cagagaagtg cgaaggtctt gctggatgac ttttcacccg cactcaccca ggagcaggct
                                                                   1380
cccaagtgaa gaaaccacca aaccatcacc agctcctaga agcctccctc ccaccacctt
                                                                   1440
ctagtcacca tececcagaa gtaatgacte teaaacetgg gggatttgag geeaggggga
                                                                   1500
gagccaggct ctatgctttc tgtaattgtg tctcgtttgt gtgcacgcag gtttgtttta
                                                                   1560
                                                                   1602
```

```
<210> 4915
<211> 2671
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (308)...(1500)
<223> similar to gi2047349 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4915
cgcacggaaa gtttggaggc ttagcaagga gggtggtgcc ggcctccgcc cggtggtggc
                                                                       60
agaactgcct gtgcgagcac ggcttccacg tgggctgcgc cgccgggcgt catgtcgggc
                                                                      120
ctaagagaca cgctctacag ctgtgaaatc tgaagttcag gtttgcattt ccttactgct
                                                                      180
ttgtcttgaa gacagaacga tgccaaagaa agcaaagcct acagggagtg ggaaggaaga
                                                                      240
ggggccggct ccctgtaagc agatgaagtt agaagcagct ggggggcctt cagctttaaa
                                                                      300
etttgacagt cccagtagtc tetttgaaag tttaateteg cccatcaaga cagagaettt
                                                                      360
tttcaaggaa ttctgggagc agaagcccct tctcattcag agagatgacc ctgcactggc
                                                                      420
cacatactat gggtccctgt tcaagctaac agatctgaag agtctgtgca gccgggggat
                                                                      480
```

```
540
gtactatqqa agagatgtga atgtctgccg gtgtgtcaat gggaagaaga aggttttaaa
taaagatggc aaagcacact ttcttcagct gagaaaagat tttgatcaga aaagggcaac
                                                                      600
                                                                      660
gattcagttt caccaacctc agagatttaa ggatgagett tggaggatec aggagaaget
ggaatgttac tttggctcct tggttggctc gaatgtgtac ataactcccg caggatctca
                                                                      720
gggcctgccg ccccattatg atgatgtcga ggttttcatc ctgcagctgg agggagagaa
                                                                      780
acactggege etetaceace ceactgtgee eetggeacga gagtacageg tggaggeega
                                                                      840
ggaaaggatc ggcaggccgg tgcatgagtt tatgctgaag ccgggtgatt tgttgtactt
                                                                      900
teccagagga accatteate aageggacae teetgegggg etggeecaet egacteaegt
                                                                      960
gaccatcage acctaccaga acaattcatg gggagattte ettttggata ecateteggg
                                                                     1020
gcttgtattt gatactgcaa aggaagacgt ggagttacgg accggcatac cccggcagct
                                                                     1080
gctcctgcag gtggaatcca caactgttgc tacaagacga ttaagtggct tcctgaggac
                                                                     1140
acttgcagac cggctggagg gcaccaaaga actgctttcc tcagacatga agaaggattt
                                                                     1200
tattatgcac agactecece ettactetge gggagatggg geagagetgt caacaceagg
                                                                     1260
tggaaagtta ccgaggctgg acagtgtagt gagactgcag tttaaagacc acattgtcct
                                                                     1320
cacagtactg ccggatcaag atcaatctga tgaaactcaa gaaaagatgg tgtacatcta
                                                                     1380
tcattcctta aagaatagta gagagacaca catgatggga aatgaggagg aaacagagtt
                                                                     1440
tcatggactt cgcttccctt tgtcacattt ggatgcactg aagcaaattt ggaatagtcc
                                                                     1500
agctatttct gtcaaggacc tgaaacttac tacagatgag gaaaaggaaa gcctggtatt
                                                                     1560
atccctctgg acagaatgtt taattcaagt agtctagtgc ctttgcagaa tcaaatgcct
                                                                     1620
actattttat atgcatatat taaaagaaaa gcaaagacct gagccgagga gaggatgaat
                                                                     1680
teaagtttee ttacctgegt atctactaac aaacatgaga ectecetgtt acaggtggte
                                                                     1740
agttggccaa atgtactaac gggcacatga aagaaagaac agcaaattac caagtgtctc
                                                                     1800
agaaaatgac aaaaccatat tttgacaagt ttatttaatc cagtgtggta gaaaaggcac
                                                                     1860
aattocaatg tatoatttaa aattgaatgt cattaacotg gotttgttot ttggaagaaa
                                                                     1920
caacttettt aaagagette tttggeteta gaaaaattte aaacaattaa aataagaaaa
                                                                     1980
aattttaaac tggtttttta taatgaaaat atacatacct ttgtgtatag acaagcccat
                                                                     2040
gcccattaaa ataaagttat cctgtaacat aaattttatt aaataatact tccccacaga
                                                                     2100
tgagaggcac gcaacaccta tggacaaaag ggagttacag aggctgctta aaagatggag
                                                                     2160
aaaagcctga gattgaagga ggaaaaaaac ccagtattta aagtctataa aaaatactca
                                                                     2220
aaatagtggg gtcctccgag tttaaaatag tccattggtt atttttacat tctaaaqtqc
                                                                     2280
catgtaggtt gatatttttt aaaatatcat tggagaattt aatcctttcc tttataaaaa
                                                                     2340
tagagcattt ttcctgcctt tcctggcaaa agttggggat aaaaggaaaa aaagttgtca
                                                                     2400
aaatgtaatt ttcagtccca attcacccag gaaaacatgc ttgtgaattg tgcagtaaaa
                                                                     2460
ggtggtaatg actactggaa gctaagtcaa agggtgattt cccacctgaa ttttacttac
                                                                     2520
ttaaataaaa gttacttaca atgggagtga aaaactgagg tttctgttat ttagtagaga
                                                                     2580
aatcaactcc acgtttactt aaagagatgg taaggtcaag gttcaaatgc tactgtgttt
                                                                     2640
taatttggat atttgaaatt tctcttgagg c
                                                                     2671
```

```
<210> 4916
<211> 1841
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (129)...(698)
<223> similar to gi4240317 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
ggagtacacc tgcggtactc cttccggaat tcacgggtcg acgatttcgt gcgaagaaat
                                                                       60
cattgtttaa tgccccgcac attttatatt tgtgacgact agacaatttc tctggtttct
                                                                      120
tggttgaggt gaccaaggaa gaaaggcaca ttgttaaacc tctctatgat agatacaggc
                                                                      180
ttgtaaaaca aatgctgaca agagctagca tcactcctgt ccttggatct ccatccacca
                                                                      240
agcgaagggg tcagatgtta cagccaatca tagaaggaga aactgcacat ttttttgaag
                                                                      300
aaatcaagga ggaagaagaa gatggtgtta atctgtcctc tgagttaggt gatatgttga
                                                                      360
aaactgcagt acaggtacag tetteattaa aaaactetga atetgatgtt gaagaaaate
                                                                      420
aagaaaaact ggctctggat ctccgattgt caagttctcg agcagcttct atgcctgaat
                                                                      480
tattggaaca actttggaaa gccagagctg aaaaaaagaa actacgcaaa acgttgcggg
                                                                      540
aatttgaaga agcattttat caacaaaatg gaaggaatgc ccagaaagag gatcgtgttc
                                                                      600
cagtgettga ggagtacaga gagtacaaga aaattaaage caagettagg ettettgaag
                                                                      660
                                                                      720
ttottataag caaacaagat tottoaaaat coatataaga tacgttoott gaaaattoat
atcataaagt cagttgtatt cettgaaget atcategtgt gtaettgget ggtaettaaa
                                                                      780
ttegttttgt caggeactea gagaatetea ttttgtaett ggttgtggtg ceactaaaea
                                                                      840
aaacaaatga tgggagagta agtaggccct ctcaagggag cgtaagtgat gttccatatt
                                                                      900
aaccacagac tgtcctctcc acctttagca aacatatggt ttacttcatt gttttgtact
                                                                      960
acagatacat ccttttagca aaagactgga attttatcct ttcaacttca agaactttgg
                                                                     1020
aaatgcaagc tttttgttat taccaacttt ttgtttctca ttactgaaga aaattggagg
                                                                     1080
aaaatettea taetgaatte ttetgttgee tttttettae agaatgaetg aaaatttgaa
                                                                     1140
agaaaagcct ataaaagggc acatacgcaa ctgtgttctc tgttttccta gaaaaccaaa
                                                                     1200
atcaaactga gatttcaagt cgtactatgg aacacctttc tgtttaattc ccaaagtgac
                                                                     1260
atotteteac aggtagtatg ttagtaaaat tttgcaatte getggteaca eageteeegg
                                                                     1320
atgaagataa cagttggtag accaaaaggt gacctcgctt agtatattga aaacacacac
                                                                     1380
cacacatcac acacagaact gaatcatacc acgtgctgcc tatgggactt cagttactgt
                                                                     1440
tteetgagtt actgittate egetggeaat ggtgtgattt gtetggatea gateegtget
                                                                     1500
attocccaac ccacctccag ataatgtgag aaaatagcca tgtcagtatg taggaactct
                                                                     1560
gatggtgctc agatttgtgt gttcaatcaa tgggcttaaa tcagcaaaat attatgccta
                                                                     1620
aagtaaatet gttettaaca agggetetae caetgeattt teacatgtae etteaggggg
                                                                     1680
ttatctttt tttttcccc tcctatttta atcagcaaaa tccttaccaa aacaacgaca
                                                                     1740
acaacgcctt tttaaggaac cacccttggt gcaatattaa catgctgtta aaagcacttg
                                                                     1800
tttacaggat gggtaagggg ttgcccctgg ttttatactt t
                                                                     1841
```

```
<210> 4917
<211> 1307
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1159)...(440)

<223> similar to gi5106787 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
tctcttctca aatggttcag cattcccaat caaaaagtgg tgtgtggtaa cctaggtatt ·
                                                                      420
gtgcttgttg agccatttaa ttttcctcac cttccgattc ggattcttct tctgcatttt
                                                                      480
gtaaccactc aacaaatttc ttcatctggt caagaaaaac acttttgcct ttagcaacat
                                                                      540
gtgcttcctt ataccatttc agtattgctt cttcgctcag aacatcagct ttataaaaga
                                                                      600
gaaccacaat cttctgaaag gctttcatga aatggatgtt gtcgtagcag tattcctgaa
                                                                      660
cettetggag gaggateage tetgaetgge ettgggaget gaacaeggee ageaggggag
                                                                      720
catattgctt caggtgcttc agagcctgct ctgcaacaag ttcttccttc ttgttccact
                                                                      780
caacagcgtt cattatacat gtccacagaa gaccaatcac tgctgtttct ggaagatcat
                                                                      840
tectetteat ttettettig acataaagea ceaecteett gategggeat teetgagaaa
                                                                      900
gacgetectg gagetectte tgeagtteet teetggtgee cagggactge tggactegga
                                                                      960
ggaagtegga aageteetta agaeetgegt cagtgaagta titageaaaa tgateeacae
                                                                     1020
tetgtetgtt aactggaaag agtteaagca geetettgte taagttgget ttteteaaag
                                                                     1080
acgaggtaac agagttggca tetttttetg ceatecatge tttgaaaage ttgaéageaa
                                                                     1140
atgaggccgc aatgcctgtt gaaaaacaaa agagaatttc attcctttta cgagcaaaac
                                                                     1200
caattgtgat ggtgtgcaaa gcaaccaggt ttcctgaaat gtgtaaataa ctaaaagact
                                                                     1260
aattttggta caaatgaaaa gtcaatagac ctctaggcaa attctcc
                                                                     1307
```

```
<210> 4918
<211> 2550
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(848)
<223> similar to gi2529707 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## agtotacato ggotocttot ggtoccacco cotoctcato cotgacaaco ggaagotott 60 tgaggetgag gaacaggace tattcaggga catccagagt etgeecegaa atgetgeeet 120 gcgcaagete aacgacetea teaaaaggge caggetggee aaggtecaeg cetacateat 180 cagetetetg aagaaggaga tgeeeteggt gttegggaag gacaacaaga agaaggaget 240 ggtcaacaac ctggccgaga tctatggccg gatcgagcgg gagcaccaga tctcacctgg 300 ggacttcccc aatctgaaga ggatgcagga ccagctgcag gcccaggact ttagcaagtt 360 ccagccgctg aagagcaagc tgctggaggt agtggacgac atgctggccc atgacattgc 420 ccagctcatg gtgctagtgc gccaggagga gtcacagcgg cccatccaga tggtqaaqqq 480 cggagcgttc gagggcaccc tgcacggccc ctttgggcat ggctatgggg agggggctgg 540 agaaggtate gatgatgetg agtgggtggt ggecagggae aageecatgt acgacgagat 600 cttctacacc ctgtcaccgg tggatggcaa gatcacaggc gctaatgcca agaaggagat 660 ggtgcgctcc aagctgccca acagtgtgct gggcaagatc tggaagctgg ccgacattga 720 caaggatggc atgetggacg acgacgagtt tgcactggcc aaccacctca tcaaagtcaa 780 gctggagggg cacgagctgc ccaacgagct gcctgcccac ctcctgcccc cgtccaagag 840 gaaagttgcc gagtgatggg gtggggggac attcagacgg gcagtgttag aggaggagat 900 960 cacatatgca tatettgaca ttgetetgta ggagagagag gaccatgacg cecacqtttg 1020 cagctgatac ttgtttgggc acacctccaa gttctcggga ttagaaggac aagagcactc 1080 ccaggeccca gagtetaage etaagtetet ategetette eceteteete ggecaetece 1140 cagataccag acctgaggca attcacttgc cagcacagat ggccaaccca cctccagatt 1200 ccccagtgct tccacacccg ggctctgagc aaatggaaaa gacttttcat ttagtagaca 1260

```
atteacttet ttttetgtge tteecetate tgetttgget teetaataag aaateeatte
aagagctagg agatctgagg gcaggcgggc agctgcaggg aggagaggtg agaaaggaag
                                                                     1380
cgtcttctag agacattggc ccaggagctc tgttctttcc taatctaagc ctctgtcttc
                                                                     1440
ttcggcaaac cttgctttga actctgccag tatttcattt taaagaatcc cagagcggga
                                                                     1500
gagagaagag aaaaaaattg ataagagtga ggaaattgtc ctgtagtcta ttgaaaacca
                                                                     1560
gtcaaggtgg ttttagttca tagattttgt tagatgttct ttccacctgg cctatgatgt
                                                                     1620
ttagatgtte atacttgact cacatttace cageceetee tgeqtaceaq qaqetqtqtt
                                                                     1680
aggeaettta tatacattat tetatgtgge ceteaetgat geeceaggga agtatgeatt
                                                                     1740
agcetteeca ttttgeagtt gaggaggetg agtageetea gaagggttta ggegaeette
                                                                     1800
tgaaactcac agaagtcacg tgatggagag aggattcaaa gccagggcct cagaccctca
                                                                     1860
cacactigic igigotatga igiatgoagg atoccagoat igataccoaa igacaaacta
                                                                     1920
tggagaacaa gcaaagtatg caggccccct gcagcctccc aggacaggct ggcaagggag
                                                                     1980
gagggccggc cagcatttgg tgggccatca gtctggccat ctgtcacgtc acagaagcaa
                                                                     2040
accytycett ctyyctetyc yccccatatt cccaycatca tayacatcca acaycaccay
                                                                     2100
caggagagtg ggctagcctg ctggatgctg ttcgtgcctg tccctgctct gcctcccacc
                                                                     2160
cagttgcctg aatcatccca gctcagatgc agccactgtc tcttgtcaag tgggacctca
                                                                     2220
tactattete agaaggetaa ettgagaggt ttggggeett gttéeecaga gggteeccag
                                                                     2280
ggactetgca gtgtccttgg caaatececa etgtacteaa tgccctacat tetettetgt
                                                                     2340
ggtctctccc ctggcttgct tcatggccac tgaaccaatc actttgtatg ctatgctcct
                                                                     2400
actgtgatgg aaaacaaaat gagtataact tattttatat ccatattcag actatataga
                                                                     2460
gaatattcta tgcatctatg acgtgcttac tactgcagtg catttgtcat tagtcttcat
                                                                     2520
gttaatacag tacatttatt aaattggtaa
                                                                     2550
```

```
<210> 4919
<211> 789
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (792)...(393)
<223> similar to gi1244515 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4919
 tttagcagtc tggatactgt atttctaata catttactct gacattcttt tgaggaatac
                                                                         60
 atggagaact gacaattggt tatgttagtt tacatgttcc cttgttctta ttacattaaa
                                                                       120
 cgtatctgta agaagggttt gcttagcatc cccagaaaaa aaaaaaaagt gttcacattc
                                                                        180
 tttaggtetg accegtggta aggagggga ggattagaga acatetaeta etgaceatat
                                                                       240
 ggaagttttg gatgatataa attcagagat tcagaccagc tgaatcaaat taaaatgtac
                                                                       300
 atgtaaaaaa tgtgttagat aatgggaggc aggacagaga gagagccagg tgagtgggga
                                                                       360
 gtcacgctga ggcaggacac agaggcaatc agactagcat gtggcgtttc ctatggaggg
                                                                       420
 caagatggtc agaacgggag aagctgcggt cacagtccgg gcactggaaa ggtttgattc
                                                                       480
 cagtatgttt teggaaatgt ettgttagtt cateagaceg ageaaactte catgtgcace
                                                                        540
 cttcccatgt acatttgtag ggtttttctc ctgtgtgtgt tcttctgtgt gctttcaagt
                                                                       600
. gggagetttt agtgtacaet ttgttgeate cateataate acatetgtgt atceteeget
                                                                       660
 teetttgagt atceggggat teeacaggta aaggtetett eecaggetge aegatgaeeg
                                                                       720
 aagggtgatt ctcttgcaac aatgcttgcg ggggggacac tgagttcatt aaggggggtg
                                                                       780
 acatttctc
                                                                       789
```

```
<210> 4920
     <211> 648
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (15)...(552)
     <223> similar to gi4760400 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 4920
tggaactgaa cagtctattc aacaacaaat tgactgacgg ctgtgcacac tccatggcta
                                                                       60
ageteettge atgeaggeag aacttettgg cattgagget ggggaataac tacatcactg
                                                                      120
ccgcgggagc ccaagtgctg gccgaggggc tccgaggcaa cacctccttg cagttcctgg
                                                                      180
gattetgggg caacagagtg ggtgacgagg gggcccaggc cetggctgaa gcettgggtg
                                                                      240
atcaccagag cttgaggtgg ctcagcctgg tggggaacaa cattggcagt gtgggtgccc
                                                                      300
aagcettgge actgatgetg geaaagaacg teatgetaga agaactetge etggaggaga
                                                                      360
accateteca ggatgaaggt gtatgttete tegeagaagg actgaagaaa aatteaagtt
                                                                      420
tgaaaatcct gaagttgtcc aataactgca tcacctacct aggggcagaa gccctcctgc
                                                                      480
aggecettga aaggaatgae accateetgg aagtetgget eegagggaac aetttetete
                                                                      540
tagaggaggt tgacaagctc ggctgcaggg acaccagact cttgctttga agtctccggg
                                                                      600
aggatgttcg tctcagtttg tttgtgagca ggctgtgagt ttgggccc
                                                                      648
     <210> 4921
     <211> 1071
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(1072)
    <223> n = a,t,c or g
    <220>
```

<400> 4921
ttttttttt ttgcaaatta gaattctttt aatataaaaa aaagtactaa aatacccacg 60
tggttctgct gtgttatttg ccctaaagga agtgagggc agagtgaaga atcccagtgc 120

<223> similar to gi6013381 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

<221> misc\_feature <222> (1012)...(544)

```
ageteagtgg geceagaaat gggeetttee gtaggataag gegtgeeeae teeaceteea
                                                                      180
ccagacttct atcccctctg ctgttcccag cccccaattc ctgcagcagg aaaccccagt
                                                                      240
ggtctggctt tggcactggg agtagaaggc acctgaaggg ctggctgggt gagtgaggac
                                                                      300
aggtgacctt taaaaacaaa acgacaccgt ggggtgggga agcaggtcat gcagctgtgg
                                                                      360
cagctggcag ggcccactcc tccatggcac aggtgggcat gggatggcca cttctccaga
                                                                      420
agtgaggaag cccagatccc aacagaatac tttctcaaaa ttgtttttgg tacaaaataa
                                                                      480
atggaaagaa gatatggggt ggggtgctgt ggaggccggg ccagccaccc tccccagacc
                                                                      540
ttagatcata gcgatgctct cgggggcaca gttgaggtgg gtggaggtgc tgctgctccc
                                                                      600
ggaggacttg caggcccggc caggggtagg ctgcagtgca gccaccagtg tgtctgagga
                                                                      660
gactgcccca aactcgtagc tgaaggtgcc atagaaaatg aggatatcga tgacacacac
                                                                      720
ccactcacac agggctgccc catgttgcag ctgagaactc tcatggacaa agaagactcc
                                                                      780
actgaggacc agggtgataa aggcgatgac agccagcaca cttcgcagat aggccacagc
                                                                      840
caggtccagc ggggcggtgg ccccttggta ggagagagca cagtgcaggc aaacaaagag
                                                                      900
cagccccgca gggaaggcca cgccagctcc aacgtagtgc agagacctgg catgatccac
                                                                      960
ctgaaagttg ccaaccacca agaggcccgc agcgttggtg cagcctgtga tagtccnnnn
                                                                     1020
nnttngcggc cgtactgcaa aatgggtttt catttggggg gaaccgctac g
                                                                     1071
```

```
<210> 4922
<211> 1738
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1718)...(1342)
<223> similar to gi4582465 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4922
ttttttttt ttggggagaa aattaaacct tatttattt taaaatcaaa ccactaggaa
                                                                       60
aatatatcac agcctggaaa cagcaaacgg acaggctata ttataatttc aagtaataag
                                                                      120
ttggtgaaaa ttcaacgaag ttgctatcaa aacaataagg tgccatgctg gggcaggaac
                                                                      180
actgccagct gcacaagccc caggcaaaaa tggtatttgg taatgggggc tgtctctct
                                                                      240
ttgctctaag ggagtcagct catcctagcc caagttgctt actttttctc ccttgaattt
                                                                      300
cctgttgcca ggggtttgtc tcaattgggc tctgttaatt cagggggcta agtaggcaat
                                                                      360
gctaggtgta ggctttcatt ccatatgttc taataaaacc aggttttccc aaatccagta
                                                                      420
cttcatttac tctgttgtaa tcaagtagcc aactgctcct cttttactgt tcattcctag
                                                                      480
atactagtat atatcacaat caaaaccccc ttctcttcaa ggggaaagtg ttactgcaag
                                                                      540
attgtcctgt cattttgtta cacacageet caggggeeat cagecagtaa ttetgettee
                                                                      600
cataattagt gtgtcatcac ctctcatgtt tctgcacagt ctccaggctg aaagatgcag
                                                                      660
catgtaataa ttttaagaaa tgtacatcca catcttgatg accagaaatg gggatccaca
                                                                      720
aggaacattt caaagttett atecaaacta gtetacetee cagttecaca tettaaaate
                                                                      780
aacttgtatg cccttgtata aattacccca aatcaagaaa acaaagaccc agaaaacttt
                                                                      840
ctttcccttc taagttagtg acctcattga ttttgtttca cagcttatgg aagatggtgg
                                                                      900
ggtgacactt ttggtaaaca ggatgttggc aacaaagaga aaatatctct cctcagactc
                                                                      960
caccaactet aacetgecag cetgttagta cetgtgtagt aagaagagte tggtacettg
                                                                     1020
gagggetetg gettgttaca ggggagagee ttactgecag gacaagcact ggecacagga
                                                                     1080
aataataage tetaaaaete teetgtaata tetetgaete gatttageae caettttte
                                                                     1140
catttcattt tttagggact gaaacataaa ataaccagtg tccagaggca agtgacatat
                                                                     1200
gccttacgct tgtggccatc cttcatttct tcattcgtaa actttgctta aaagactaaa
                                                                     1260
```

```
atteceaatt eettataaaa aatatattet tgeeeteage eetgatggee aetggeaaat
                                                                     1320
actittatit tecaatigat aagagageet eeticatett etiggieata giigggatga
                                                                     1380
ggtgcatgtg gtcatccaca cacttggtca cacaactgtc cagetgctgc ttcacctgaa
                                                                     1440
gctccttact cccagcatct attgaatctt tggctttgtc gttgcaatgc atggtgcacc
                                                                     1500
.gggccaggcg gtcctggaac ttctccagct cactggtgac caaagcctgg gcttgagcca
                                                                     1560
gaggcacatg gcagcgctcg atgcactggt gcacctgctt catggaggcc tggctgtcct
                                                                     1620
cacaacaget ggegetgeac eggaacatga gaccetgeat etteeggatg ttetetettt
                                                                     1680
ccagactett caccatggac tecacegeet cetgeaceeg gagetgetge ageteage
                                                                     1738
```

```
<210> 4923
<211> 1349
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(415)
<223> similar to gi2588610 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4923
cggttcgggg ctgtaccggg gacccacgcc aggtggccag tgcatctgga aacccaactc
                                                                       60
aatgeeecce gaecatgage gaaacttegg etteacceag tttgeettgg agetgaatga
                                                                      120
gctgacagca gagctgaaac ggtcgctgcc ttccaccgac acgagactcc ggccagacca
                                                                      180
gaggtacctg gaggagggga acatacaggc cgctgaggcc cagaagagaa ggatcgagca
                                                                      240
getgeagega gaeaggegea aagteatgga ggaaaacaae ategtaeaee aggetegett
                                                                      300
cttcaggcgg cagacggata gcagcgggaa agagtggtgg gtgaccaaca atacctactg
                                                                      360
gaggetgegg geegageeag getaegggaa catggatggg geegtgetet ggtageeetg
                                                                      420
geceeggggg caggaggete tggtteetea etecteetge etecaceece taccatggae
                                                                      480
acatgggtga ggccgggctc cccgcctcac tgcccttgag accaaagggg cagccctggc
                                                                      540
cetecetece etetgetgge cagagggtet geateteage ceaceceaa ecceacegtt
                                                                      600
tggggtgaga agcagaatot gtgcttcccc agtctccttg ccccagacaa ccagcatgta
                                                                      660
agaccettee egetteacea tteegattee tgteeeettt ggggtaettg ggggagaete
                                                                      720
tggctcccag gatctgttcc ctatttcagt gccttcctag gacacagggg actccttgac
                                                                      780
gctccccagg ctttctgtgc ccaggcctct gtccccagcg gtgaggttgc agtgagtgaa
                                                                      840
ggagaggagg tgatetgtte teceteceet tetgeceate tecageatet tetteceett
                                                                      900
ecctggeeet geagggeett etecagetee etttggttag teeetggeea teeeteetgt
                                                                      960
cctggatece ttetecetaa etgeaaaatg cetgeagett eeageteett egteeetgat
                                                                     1020
cctcaagcgg ttccctcccg tctcagctca gcggatcccc cagagtggag gaggcctctc
                                                                     1080
catgaggagg ggagcagccc aaggcacctg teetetgacc caeeggcage gagtgegcag
                                                                     1140
gtgtgagtgt aagttcatgt aggagagtgt atgcgtgtgc gcctgtgccc tgcttgcagg
                                                                     1200
caagcaggge teecteatgt ageceggeet teeceetget gggggteeae cacategetg
                                                                     1260
ctetttetea eagtetgeet etgatgaggg egaattgeta tgacatteea ageteeaata
                                                                     1320
aagactgtcc cagactttga aaaaaaaaa
                                                                     1349
```

```
<211> 1021
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1001)...(604)
<223> similar to gi3955266 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

# <400> 4924 ttttttttt ttttaaaggt acaaatttat taaaactttg cagttaacaa ttattgaaga 60 aattagtatg ttaactataa aaacctagaa gtcccaggaa ttagatttca aaggatttgg 120 tttcaaagaa ttccttataa gtgattttaa ccattacatt ctttgttaaa ctgggacttt 180 ttctactttg gggattattt tgccccagct gtggccatgt ttaaaattag tcaggcaggc 240 acatgaagit gigggagaga igaigaggit cgcactetta tecaagiitti agcaaatagg 300 cactgtattt cccatttaat gggaatgcag tttcttctgc ggttctttgg cataaagagg 360 ctctagactc cccatttctt tcactcaagg aagagccatt tgcattcttg tcctcacacc 420 tgagtacttg tcacaagtta aaacactggc caaatcacca cctcaggact ccttgtatgc 480 attcagataa aaacgtetgg ggtgggggaa ggtgetttee etcagttett gtteteacae 540 atctgtcatt tagttggtca cagttgggca ggtagaagcg ggttaaaagt tttaaaactc 600 ataataateg tgtccagaga taaatgaagg ctgttgttaa caagcatgac agaaaagcct 660 ggaccagetg ttttetecaa aaagecagtg gaaagggggt cetgaagaag tgacaaaage 720 cateccagee gecetgagee tgeagecagg egeggtgetg ecceatgage egegagetea 780 gcaaggccac caggcgctgg cagtcccggg cgacgtcgcc ctcctgctcc tttagccgcg 840 getggaagee ceaettette cacegggegg teaceagegg ceetetetee ageagegtee 900 ctgcgaaggt cacgagcgtc accactaagc cccaggtggg gccggggctg tcggagagca 960 cggaatccgc catcagcgcc accagctcga agcggttccc ggggtagccg aggtagcgg 1020 1021

```
<210> 4925
<211> 1283
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (113)...(835)
<223> similar to gi4929321 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4925
acagaggcaa cggctagggg agcggaggtt caagccacat gtctgcgtcc tcgggggcca 60
gagcccgcca gccctcgcgg atcccggctc gcggccagcc cgagcggctc gggttttaaa 120
aatcaatttg attggccaca ggaaacgtat tttggcatct ctgggagaca ggctgcacga 180
cgatccccca cagaagccc ctcggtccat caccctcagg acaggagact ggggagaacc 240
ttccattacc ttgcgacctc cgaatgaagc cacagcctct accccggtac agtactggca 300
```

```
gcatcaccca gaaaagctta tottocagto gtgtgattac aaagcttttt atttaggtto
                                                                      360
tatgctgata aaagagctta gggggacaga atcaacccaa gatgcttgtg caaaaatgcg
                                                                      420
ggctaactgt cagaagtcta cagagcaaat gaagaaggtc cctactatta ttctttctgt
                                                                      480
ctcatataaa ggagtcaaat ttattgatgc aacaaataag aacataattg ctgagcatga
                                                                      540
aattogtaat atotootgtg otgoocagga cocagaagac ototoaacat ttgootatat
                                                                      600
cacaaaagat ttgaagtcta atcaccacta ctgtcatgtg tttactgcct ttgatgtgaa
                                                                      660
tttagcctat gaaatcatcc taaccctggg acaggcattc gaagtcgctt accagctagc
                                                                      720
actacaagca agaaaagggg gacactcctc cacacttcca gaaagctttg aaaacaaacc
                                                                      780
etecaaacce atececaage ecegegitag cattegeaag teegigeaga tegacecate
                                                                      840
tgagcaaaag actctggcca atctaccgtg gattgtggag ccgggccaag aagccaagag
                                                                      900
gggcattaat accaagtatg aaaccacgat tttctgatac tcgccgtcct cctgtcctcg
                                                                      960
eggtgeettg etegeeaage ggteeeggag eaggetttee ttegegeete egegteeace
                                                                     1020
cagcccagga ggaagactgc tctgagcgtg cggccttgtt acgggcgaaa ggccactggc
                                                                     1080
cattcctggg gaagttcttt ctgcaccagt gatggaaaac gcaagacttt ccagtcgcaa
                                                                     1140
eccetgagag gegtgagetg agatgggttt tecetgatge tecegaetee ectececaee
                                                                     1200
acctaccaag gtatttctga tgactccgcc ccagtacttg ctttgcttca tttggggaaa
                                                                     1260
ataatacctt ttctttaaaa aaa
                                                                     1283
```

```
<210> 4926
<211> 972
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (112)...(496)
<223> similar to gi407097 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4926
cgctctctcc tgagcataaa ctcctcacca cattcacctt ggtacccact gctgcttaca
                                                                       60
tggctcctgc tccgtgggaa cgtcccgcag atgttttcct aaccaaggtg ctttcccgtt
                                                                      120
gcagategtg gcaggttgat eggeggettg cetgaegtgg tgaecateat ggaagggaag
                                                                      180
accttgaatc tgacctgcac ggtgtttgga aaccctgacc ccgaagtgat ttggttcaag
                                                                      240
aacgaccagg acatccagct cagcgagcac ttctcggtga aggtggagca ggccaagtac
                                                                      300
gtcagcatga ccatcaaagg cgtgacctcc gaggactcgg gcaagtacag catcaacatc
                                                                      360
aagaataagt atggcgggga gaagatcgac gtgacagtga gcgtgtacaa acacggggag
                                                                     420
aagateeegg acatggeeee geeecageaa geeaageeea ageteateee egegtetgee
                                                                      480
tcagcggcag gccagtgaag gcgttttcct agcctggaga tgggaaaata tgcttggcag
                                                                      540
agacaggaat gctgtgtgct tgttccaaat gagcagctgg catccgagtg gtgtcctgtg
                                                                      600
tgggctgata gttgatcaca cattgtgctt ttgatttttg catttggtga tgaatatttt
                                                                      660
atacccgtct aagggagaaa gctaatgttt tccacaagac tgaacaacgt gtatttacac
                                                                      720
gagggtagac ggcagatgcc tgacagagag tgggttggca gacaacacac tagcattttc
                                                                      780
acgggtgtgg gcacatgggt gtggcacctg gacgtgtgca gcatgtggcg gtctgtgtga
                                                                      840
agccaccgtg cttctctttg gggggccgcg agatctagca tctctgaaat cctggctgtc
                                                                      900
gaggetttga ageatgtgtt acctggttaa gettgtttte tettgettta ggeaaataaa
                                                                      960
agtttaaaaa tc
                                                                      972
```

```
<210> 4927
<211> 2002
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(137)
<223> similar to gi3228374 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4927
gtcgacaaag ccttccatga cctcgttaga gtaattaggc aacagattcc ggaaaaaagc
                                                                       60
cagaagaaga agaagaaaac caaatggcgg ggagaccggg ccacaggcac ccacaaactg
                                                                      120
caatgtgtga tettgtgaca ggeetgagge eetgggeaca gtgaeggtgg eetggeeage
                                                                      180
cetegggace cetececace taactgeact gaaaccattt etaaccacaa ceettggece
                                                                      240
aaggacttgg tacaggaagg gagaagggca ggtgggcagg gagcagacag ggtctggctt
                                                                      300
tgcccagagg gcacgggctt tcccacctct caaagagaca aggaagccac ctgtaagcag
                                                                      360
aagcagcatc caagtgcccc tggccccccc atgtgttgat tcaacccggt tcctccccct
                                                                      420
ctctcggtgg gtgtgttgtt tattgtaact acatagtgtt ggtttgatgt ggaagtgttt
                                                                      480
atccacatac aaagtacaaa acaagccatg aacaagcttc tttcccttac cccccatcca
                                                                      540
caatgtctga gcttgggatg tcttttatag atttttaaat tattttagtg attattattt
                                                                      600 %
tattaaaggg gtctgggctc actgcctggt gaagtttcaa gtgttcagca gacctctctg
                                                                      660
gtaacatatc tggaatattg ttgttgtttt ttaaccgagt tttcccatca gtgccaaaag
                                                                      720
tctactcaat ctgaaagtag agtgtctgag aggacagaag gtaatgggaa ctgtagctgg
                                                                      780
aggcctcagg ccatgggtca aacctgggag ggaaagagac cctacacatg gcctagaaat
                                                                      840
gagagaagag agaggtattt acccagagga ttttcctatg gttggggatg caaatattag
                                                                      900
aaaacagatt gtattttgct gaggggagtg gctgtcatga gcatgtcagt tctaaaaggg
                                                                      960
gttttcatta tcctggaaat gtataaacta aagtaagctg attggctttg caaacatgtt
                                                                    .1020
catttgtttt tcagacagta tgggttaagt tctctgccct ccccaggggt ctgaggaggc
                                                                     1080
totgggttto toagatotgt otottgotgo gttttcacat cagotgtgot gottggtgoo
                                                                     1140
tetetgatae gaataeaetg aeaegteaaa gtaaeetaat gtggaeaeea teeagaaaae
                                                                     1200
tccagttcat gctggatctt aaccaaaaat gattcaatac tgttatcact aaaacagcac
                                                                     1260
caagacetga agecatette cettggagte aactgactae cacetetata agectagtea
                                                                     1320
atgagcagac cccttccagt atttgtaaaa gtagtactag gttgcctttt tggcaatttt
                                                                     1380
tattgacetg ttgaatettg actataaaat gatetgagaa gtaaggaagg etgggetgat
                                                                     1440
gtgtggetet catatacett etgeaagggg geagteteee cageteeetg atgatgetea
                                                                     1500
cccccgccc cccacctcag gtgctgctgg tgtgagccaa agactggagt ttttccagct
                                                                     1560
ggggtgggag tggagagaca acaggaacaa cgctgcacca aagaaaaggt cagaataaaa
                                                                     1620
ggcagcacag ctggtgacct tattttctag atgttacaaa tcaggtcact atgcaaacta
                                                                     1680
gaatateete ageaggtgge etggeeacte tggagaaaga aacceaagga aagtgageac
                                                                     1740
ccaactggat gccaagacac ccgggttctg aaaatgtgct gtgttcctac ctcggcaaga
                                                                     1800
tcaccagcac tgaggggccc agctggagaa tgattctgct acaaaaggag acagttgaga
                                                                     1860
cttttgcttg ttggaaatca aacttcttat ttgtctaaat tgcccctttt tctgttccta
                                                                     1920
aaaggaagga taagagagaa cattccaggt gaggcacttc aaagtttcct tagaccctat
                                                                     1980
agtgttaaga ggtattttaa ac
                                                                     2002
```

```
<211> 1057
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (43)...(677)
<223> similar to gi4559368 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 4928 -. tegtgtggtg gaatteaegg cateetgeee ceaetgegea cagaggeeae agagteegae. 60 teagacageg aeggtaeggg tgaeteeage tatgeeagag tggtggggte ggaegeegtg 120 180 gactetgeac agtectetge cetetgteeg tetettgeag tggtggggte agatgetgtg 240 gactetggga cetgeagete tgcetttget ggetgggagg tgcacacgeg aggtatagge 300 tecagaetee teaceaagat gggetatgag tttggcaagg gtttgggeeg acaegeggaa ggccgggtgg agcccatcca tgctgtggtg ttgcctcgag ggaagtcgct ggaccagtgt 360 gtggagaccc tgcagaagca gaccagggtt ggcaaggctg gcaccaacaa gccccccagg 420 tgccggggaa gaggggccag gcctgggggc cgcccagctc ctcggaatgt gtttgacttc 480 ctcaatgaaa agctgcaagg tcaggctcct ggggccctag aagccggggc ggccccagcg 540 gggaggagga gcaaggacat gtaccatgcc agcaagagtg ccaagcgggc cctgagcctg 600 cggctcttcc agactgagga gaagatcgag cgaacccagc gggacatcag gagcatccag 660 gaggeteteg ceegeaacge tggeeggeat agegtggegt cageecaget geaggagaag 720 780 ctggcaggag cccagcgcca gctggggcag ctccgggctc aggaagccgg cctgcagcag 840 gagcagagga aggcagacac ccacaagaag atgactgagt tctagagacc ccacaagcac tatggacgaa gcgtgggacc ccagcacggg ctgccctcag gaagaccagt gttgcccgag 900 gaggggeegg eetgetggee tggggegtge ggacactget gagtggagae agagetgegg 960 ggtcccatct ggacacttac ttgcccacct gccagtgtct tgggcatttc cttggcaagg 1020 acattaaagt gatttcatca cagtgtcaaa aaaaaaa 1057

```
<210> 4929
<211> 4061
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4062)...(2827)
<223> similar to gi577307 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4929

ttttttttt ttagggggtt aaatgtttat taaatcaagc ttttaaatta tatatccacc 60
tacagtctat aaacaaatat agtacacatg tatgtaaaag gctagcagat aagaaccagt 120
ggaaaaacta aagttccctt tgcacaccgg cacctcatca caacaccctc ttggtgtgga 180
tgccatgggg ccatgctgta gtcaaaagtt aaatgaaaaa ccacaagttt agtttgactc 240
cgtctcctag ggtggatttc attcagatat ttgttccata ttataggagg gtggatccta 300
```

```
gcaaggcaac agtgtagttt ttacattcac agattggctg aagtagtaca aattgagctg
                                                                      360
ctaatctagg tgtctccctc cctgttacca tacttcataa gaaatgtgaa ttaaaatgaa
                                                                      420
caatggacca caggtggtta taaaaataga taactcgcag agtcataaat atctacagtt
                                                                      480
agtagagcag aaacttctaa aatttacctt tttccataat gtgcagaata tcctaagtat
                                                                      540
gttcaagaga cacagtcagc agacttcaga gtggtaatta caagggcatt tgtaaagaaa
                                                                      600
taacactoga gtacaaacco agagtaagaa gotgaatgoa gatgaaaata ogcaaaacac
                                                                      660
gcaaagttcc aactcctcac atctcattat gctacttact agacaccaca attagcttac
                                                                      720
agecetttat atatetttta aagtaaettt ttgttaeetg tgtacaaact ttaacaaaga.
                                                                      780
                                                                      840
tttttcatga gacaagcaaa gtgggttaat ggtggcgcta aaactgctga aacttggagt
                                                                      900
gttttgtgtg ctttcgtata cttctgtgta tggggcttta aaatgctcca aaaatgtttt
ggatagagtt tttaaaattc ccatgaaaat ctattttata atcatttcaa ggtatagaaa
                                                                      960
aaaagaaatc ctaaactggc attgagggac aggcccaaat ctcacaaagt aacttaaatt
                                                                     1020
                                                                     1080
ctaggaatat ataaattaca ttcatatgtt catttaacac gtatcaagtg ctatgtaagg
taactgtaat ggattctgaa gccaatctca tttaaaacag tacagtaaat cccattctaa
                                                                     1140
ttctacaatt aaagcactta ttccaggtaa tgtgcgtttc agcaaagctg acatcttgta
                                                                     1200
caacagtgtc accttaaagc ttcatcaaag attcacagca ggcctgaact gtaaaagttc
                                                                     1260
agaaccaaca atgccacagg tagttattca tcctaatttc tcgcagggag tgaagggtct
                                                                     1320
acttgagtga tcctaaggtc acctaagcct agaacagtgt tccctgaaaa ctccagcaag
                                                                     1380
tttcctcacc aaaatctctt cagtgtaatg tgtttgggac ttgctaggct agaaaaatgg
                                                                     1440
gttccactga tgtataaaca tacattcgac accttcaaga ggtgtacaga catagtgttt
                                                                     1500
cccagactca cttgaccttt ccagggaaca cctggaataa tcactggctc ttgggacagt
                                                                     1560
catttcctag ggaacacaat tagaggaatg ccaagttaaa gcagattttc taaagtagtg
                                                                     1620
gttcacatat tgtagtaagc atcagaaaca cagatgccac accecttcag aagtccaggg
                                                                     1680
tgggacctgg gaacctgcat ttctgagacc gccccttccc ccacccccc acaagtgaag
                                                                     1740
ctgatgctgc tgcaccgaag accgcccttg gagtggcact tgttgagagg atggcctgca
                                                                     1800
tagateteag etgeaggaag eceteetatg geeteaggaa aggetgeaea tggeatttge
                                                                     1860
acaaccaatg agtoggaggt caaatcagoo cagtgactto toagagggto catgoaacct
                                                                     1920 "
tggcactgac acttgaactc ctggctctgt acccctgcct cacttaggtg acccaggagg
                                                                     1980
agtgactgca tettaacaag aggacttaac agtageceet tgeaceeece agtggatett
                                                                     2040
gtgatgttta agataaatgt ttgctaaaaa atgcactaac tagcctaaag catcatacaa
                                                                     2100
gtgtctgtta atcagaagaa tgtgccagcc acagcaggaa aatcccagat gaattttctg
                                                                     2160
tettgttace tetgageett gaegaaggea tattetgaea aetaaegaag agaaaagagg
                                                                     2220
ctaaaaatgc agacaactgc agtgaggggg aaatacatga gtggattatc taattaaaaa
                                                                     2280
tgcctgattg ttaaaaaaac aaaggtcagc ccacaatcaa agtagttaat tatgctggct
                                                                     2340
ttgagatagt gtttaaaagt taaatatgtt gatctttgaa cacactcact cctccactct
                                                                     2400
accatgttaa tgctggttaa aatttaacac tagaaaaaatg agaaaaaaaa tcctccactc
                                                                     2460
aaatacatat gaattacacc taaaatattt ggctgagatc gttccaatct tataagctac
                                                                     2520
gattgtgtgg aaatttcata agcaattttg aaaaaaagac atcaaatttt ggctcataga
                                                                     2580
aacatccaca gaatgaggaa taaacccacc attcacatgt ttgcatgtgt gtttagttaa
                                                                     2640
tggcccagta ccactttggc taatgaactg cctctcacaa ttacaaaaac gaacctgtaa
                                                                     2700
aaattcatac atatccgtga tgagattaca gtcaaacatc atgttgccaa gtcctggttt
                                                                     2760
ccaccgtgaa cccaaaagat tgatcagaaa ggcagaactt cccccaacac gttgcatgat
                                                                     2820
teactitatg tatgetetgg atggetetga agacaagaca acatetettg aactggtetg
                                                                     2880
etttegtage agatetgata caetgeagta aacaatggaa aettgteeag tagteeette
                                                                     2940
tgtttgagga tgcggtacac ttcagcagaa gtctgcggtc cttggagctt ttgcccattc
                                                                     3000
agcatetect tetecaacte tteaatggte tteecagtte tggegaagge eteggeeace
                                                                     3060
ctgcggttcc gccctccgta acaggtggtg atcaggtcgg ccaccccgca gctctctagg
                                                                     3120
aaggtggctg tagacacttg gcctttgcag aagatcctgg caaaagcaat catttccatg
                                                                     3180
agteceagge ggatgaegge egetttggtg ttgteteeae ageggaggee gtegeagaae
                                                                     3240
ccagetecca cagetacgat gttettaage geaceacaga gtteaacagt gtetgeatea
                                                                     3300
tcaaccacgg taattegaaa atttggagte tgeagaagtt etttgaagag aaggeegtte
                                                                     3360
                                                                     3420
tecattaett tgetgeegat ggtggtetea eagaaettet etgeageeae eteattggea
atgttggctc ccatcagcac actgatgtca atacccatct tctcacggat gatgtcagaa
                                                                     3480
atgagettea geceeteggg gecetegtet atgecettga tgagggtgat teceageget
                                                                     3540
ttettgggea eteteeeagt gateteatea eagattetgt gaatgaactg gtggggaatg
                                                                     3600
acaaacacca gcaggtctgc atcctgcaca gcctcgctaa gatttgacat ggcaaccaca
                                                                     3660
ttttctggca gcttgtgtcc aggaagatat tttacatttt catggtcatt atttatgatg
                                                                     3720
```

```
tetgteagtt ttetgeeatt caetgittet teaaagacee acatettgae tgtggaggea 3780
aatttetgaa gtttettgae gttattacea attatittig caacagetga accecagite 3840
ceegageea egatgeacae titeaggge geegetgeea tggeegggee gaatgtagee 3900
geetggaeeg tgetteeetg geeggetgee caecteegee tgtteageet tgeeegage 3960
ggetggegge ggeeeegeee etttegeete teegeeaatg gtegeggeea eeeeegeeg 4020
gegeeggggg cegeagetga cagegggea ggaeeegett e 4061
```

```
<210> 4930
<211> 4741
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4742)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (4741)...(505)
<223> similar to gi5689487 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4930
                                                                       60
ttttttttt ttaaagttta tagaaattet ttattattag acaaaaatag actetettt.
ttcccctatt catgtgatcc tactctgaat ctctgctcag aggaggcagt gactcgctcc
                                                                      120
ccaccetet eccatecetg eegtgetgge acctgeaget gggtggaact ggcagggget
                                                                      180
gateceetgg agggetgaeg tteteetgea ggtggggetg cetgatetee tteggggete
                                                                      240
                                                                      300
aactgctgat gcctcctcac ccctcacaca cccatctctg ccatctgctc acatgcaagg
tcatcttgtg ggcctgtcca cttaacttag caggctgggg gcggggaagg agagcagtgt
                                                                      360
cccaggectg atgeccacte eteatteeet aagggagggt gettteteet gggteteetg
                                                                      420
ggtccaggcc aggggatgtg agggctgtgg ggtgctggga ggggggcagt gttgatgtgg
                                                                      480
                                                                      540
getetgaget tgtggeette etteatttte tetggeecag tagaactttg gtgatgaagg
                                                                      600
tgacaatggc gccagcaggc tgatctgggt caagctctgc aaagaggtga cacacattct
                                                                      660
cccaggget teceggette ttggccaega aaccaaagat ettggaggtg gtecegtetg
                                                                      720
ggttggtcca teteeggtet tgagggtcag tgetggagaa ggtgatgetg tteaetggat
aatggcggcg aaagaagagc ttcctttggt tgtccgtcag tgtaatgccc tgggctgaca
                                                                      780
ccttgaagtg gacaacagct ggtgtcgggc gggggctaca gctcagagct gcagagctgg
                                                                      840
                                                                      900
cccgggccac agettggggg cccgtcagtg actctgtctc cactgaggtc aagtagagca
cgctgcaggc agcaccctga cgcaggaggt ctgccgctgt gctcatgttg gtgggcactg
                                                                      960
gagectetgg ggtetettee agaggatett tgetgggaat gegeaggeag cagggeaggg
                                                                     1020
                                                                     1080
agatggggga gatggagtgc tgggagacca aggcggacag gctgccaaag tagggctcac
tggggcagec ettgatette acceetttgg geccagtete gatgaggaaa tggeggaeea
                                                                     1140
                                                                     1200
getgttecae ggggteceet ttecaggget gggcaetggg tggeggtgtg gecaeettga
gggccagccc ataagctcct tggaatgaat gactgtccct gatcaggaag gccccagggt
                                                                     1260
cettgteett cageagggea atggettggt caegggacag gtgtggettg taccagaact
                                                                     1320
                                                                     1380
tggatgtatc ctggacaaac ttgacattgc tttggctctc ttgtgtagga ggctctgggg
                                                                     1440
tttgggggac attatetgag ageagaggtg egaaggtgae atggtgaetg atgeetetgg
ctggcgatga tgcctgctct gggccccagg gtcctggctg ttgccccggc ccgggcaggt
                                                                     1500
ggcgtttctc aggaagtggg ggctggctaa ggccattggt gtcataggag gcagccaggg
                                                                     1560
```

```
1620
ggaaagcagg tgtaggtgag ctctgaggcg gctctgggct ggccacaagc cagggcatct
                                                                    1680
gggaaggcac aggagtgagg ggagacccat ctgggctgtc gggggggcct cgagggcctt
gccagggggc gtggcggagg ccaggaagtg tggtgggcac agggctccga ggactggcgc
                                                                    1740
catctgagtg gcccctgga ctcctttcct gaggccagtc actgggcgag ctgggaggga
                                                                    1800
aggtcggaga gactgggcta ggggccagag gctcaggccc acttcccgac ggcagctcag
                                                                    1860
gggcctttcc ggtgcctgcc tgggaaacag ggggcaaggc ctcgccagga ctcagtctct
                                                                    1920
gagtgggcgc tgaggtgggg gacctggtgt cctgtcgccg ggtgctttcc ttgccctgga
                                                                    1980
ctggactgct ggtgtgcagg ggcgtggagg gaccagacaa ctctgacgaa gcactgcatg
                                                                    2040
                                                                    2100
gggcatctcg gggagaccga ggcagtgtgc tgtgcccact ggggccctcc ctccaggaca
                                                                    2160
ccggctccag cgactctgca gatgccaaag gtcctgctga ggccaggtgc ccaggcaatg
                                                                    2220
ggtacctgtc ccctccctcc tccgtaggga tctcgtagct cagettccta gattgtggat
                                                                    2280
agggeggget geeeggggaa atggageeag eeegtgggga gtgggcaeea gggetgggat
                                                                    2340
accetetgee eteteetgga gageeacage tatgaggeae aeggeeatat getgggeagt
                                                                    2400
aactgggaac tgctcctcca tagctgtatg tcaccagggc agggtaccct ggatgcccat
                                                                    2460
acctgccttc ggggcacatg gtgtaggagc agccctcgtg cccttcctcg cctgccttgg
                                                                    2520
gtggetteag geagetgtag teaggeateg gggeatggtg atgeecacag geaggeaaga
gcagaggcag cgggtgccca ggccgcactg ggtgcaggag aggcttgcca gcctcacttg
                                                                    2580
cccaccette tecageetee etetecagee geagtecata caaggetget gtaggeageg
                                                                    2640
ccagettete etegeagget gggeatgggt atagggeagg eageecaggg teeteeagga
                                                                    2700
tgaccacete eeggtageet ggggegeggt agecaaagte eecagtgget ggttteecea
                                                                     2760
                                                                    2820
teteaggtgg gtaggggtat ageceetetg acagegateg geagaggege etetteteca
                                                                    2880
tegaggeete ggegtageee tggggggate ceteatagee eeegtaggee agtegeetee
tetecagggt teeetetgge eggtagtage ecceattggg aaceeegcag ggeteeeggt
                                                                    2940
                                                                    3000
agecetggeg geaggageag tggeggetga ggeeaggeet atggeetgga tacaeteega
ggtgggggcc teegeeeaca gtgggetget ettegteate taggatggee gtetegegee
                                                                    3060
cageteeceg geoceactg gecaeteege ageotectag gaggegatee ageteetgee
                                                                    3120
                                                                    3180
gttcagcage tgtaggggge ggeeggeeag gggaetcage ageeggetet gtggtcageg .
tggaggaatg gcctgagteg ctgctgacag agagcatggg gggtggtgga ggctctggag
                                                                     3240
agggtgccgg gggggtctgc cggggaggcc gctgcacctg ggcataagga ctgccatcca
                                                                    3300
ggggaccccg ggtgtgggtc aaggagccat ccacactgtc ctcgtggtgc tggttgaagt
                                                                    3360
teteatagga gteecagege aeggetgget eagtggtgtt gtagtegaea gagaeegagg
                                                                    3420
ggtcgttccg tggagtgctg cctttgatct tctcggggct ggaggagaag acaaactcca
                                                                     3480
eggaggettg gaaggggaac eteteateag tecaggeete gteaagetgg teettgggga.
                                                                     3540
aagtgagetg tggteegtgg atggtgeagg tgtggaactg gaeteggaac aegagggtee
                                                                     3600
ggtetgtgee eeggeeacce ttgtgataac atgttaccat gacategeet ttgaggagga
                                                                     3660
gggetggete caggetgatg caaagetget ggggaceagg geetgeaatg tgatagaete
                                                                     3720
cagatgtgta gacaagctgc atggactggt agattttaag gaagggctgg aagcctgtgc
                                                                     3780
caggttcaaa ggctggcagc atggggatga gcacatagtg caggaagaga gggctgctgt
                                                                    3840
tcattctgat ggagccagat agcagccac tgaagtagct gatatatcga cgctgggagg
                                                                     3900
getgeagtte tgtggeeace ttgteetege agaattteeg catggtaaga gtggeeagtg
                                                                    3960
                                                                     4020
cctggtccgc ccctgcagag atcttgctgt agtgcatgta ggcagaaacg atgacccaa
                                                                     4080
gettgeeett gttteeettg eagtatagta egaceaegtg etgtgggtea geaetgagee
atgtctccat ggctttgcag atggagcaca gcttgtccag gggtggagca tgcagctcag
                                                                     4140
gccagccgaa gtcttgaacc ttggggttta agcgggtcag gtcatgcctt ttctctgaaa
                                                                     4200
ggttgaagag caggtacttg teeeggtget tggattgeag cacatgggee agetegegea
                                                                    4260
ggtggccccg gtgccgctgt tcatcgggcc gcgcggggaa ggcggcggcc aagatgcgct
                                                                     4320
cegtcaegta ggtgaggtet aagteecage geegeteeat gagegggtee aggetgaage
                                                                     4380
tcctgggcag agtgctgcgc tgctttgagt ggttcagaga tttggtggat cccaggtgct
                                                                     4440
ctatgcgcct gactggggcc gtgtttcgcc gcaactccac gggaggcaag gcctgacagg
                                                                     4500
ctgaagteac ctttgcttca cattttctgt gcgtcgccac cttgcagact ctgcacgaaa
                                                                    4560
egectgteee ategatggte acettacata etgeacagae tggaggttte tteeggaaaa
                                                                    4620
cetteteceg gaagetatga ggeteagett teetaggett catggetete etgggtetge
                                                                     4680
tetegtgnnt tecaegenet engaagtggt etegattnnn nnneneeegg gnneetteee
                                                                     4740
                                                                     4741
```

```
<210> 4931
<211> 3034
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2522)...(1849)
<223> similar to gi2981435 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4931
ttagttctta gaggaaaagt gagacacaaa agaataagag acaggatagg taggaaggaa
                                                                       60
accttagact gtgtgaatct attctttgct aacaacagac gctacaaaaa gttctcattt
                                                                      120
gaaatatett gteaagetae agacaacaeg ttttettgae atgattttaa taaaaaatae
                                                                      180
agetgacata acagattaca tgaaactata cacaatgaca ttetetgeat agtaaccaac
                                                                      240
actgatgtgt gtacttgaat ttttaaatgg attatttata atcctttaaa gtgcaattta
                                                                      300
ttgaaaggtt taagcaaatc aggataaagg atctttctaa taaatgacta acattaaaga
                                                                      360
gatgctatat tgatatattt agataaatct ttcaaaaatc ataattgatt tctatagatg
                                                                      420
ccaaatttac ttctgttgta acaatgacct gccccctca aaccccaaac ttaattgctg
                                                                      480
aggattaaga agatcctcta attggcaaga gctttttctg atgttaatat ttttgtctgt
                                                                      540
ttcaatacat ctaactaaaa agaactatgg gtctagagta gttgctttag, cagccctgag
                                                                      600
ttctataacc acaatggtat tcctgttaga acttaagaga atgttgtgaa cgttccccat
                                                                      660
tctatttgag gagaaaacaa agaactcagt tgctttctga tttagcaaag taactatgct
                                                                      720
ttgggctata gtgttaatgt ctaagataaa ggtagcaaaa attggagtta tctaagaatc
                                                                      780
agaaaatget ttagagaaat gaactgtaag aggaatgttt etaggagetg tetgatgggg
                                                                      840
tagaagggat tgcaacacaa aggccattta ctgctgtgat tgaatattgt cattgttttt
                                                                      900
ctgtctattt cctttagttg gtgaaaatat ttcaatatgc tgctgtccca aaagcctggc
                                                                      960
cattagagga taaacaagac teetttacag ggttaataaa ggagcaagat ettaagggag
                                                                     1020
caatgccage ctaactttat tetgettaaa gaattattte tetegaaaaa getgettaca
                                                                     1080
tgagcatetg caaaatagta etgtttgtgg etgtaetgge teagcaatta ettteeccag
                                                                     1140
gaagagggta gtttgggggg taggggtgag taggaataaa aaagaacttt tccctccaag
                                                                     1200
tgtaaacagg aagcttcagc cgatcttcgg agcactgtga tcacaggttt tggctttcct
                                                                     1260
caaagtteet tittggaaat tetggatgga getgageaag geeeetegge teatgeeeat
                                                                     1320
teacageetg agaegagage tgggeaggtg ceteggtget egeaggagge aagggagetg
                                                                     1380
ctggtggtgg tggaggtgga ggaggtggag gtaatgcaga tatccctgat gtagagggtg
                                                                     1440
gagttggcga tgacggggac gtgagaggtg agctggcccc agatcctgct gaattattgg
                                                                     1500
agttgetgta ettegetgaa tgetetteae tatttteaag ageagategt tttgaettet
                                                                     1560
ttcgagctaa aatctttctt ttttttcttt cctcctcaga tccatggtgg gactgagctc
                                                                     1620
ttgtcagtct tegatgetgg tgaatetgtt tetgtteete aattagtete ttetetatae
                                                                     1680
attetttgge aatteteaat geetetttta aetttgtagg gatettaaae tgtggttttt
                                                                     1740
cagaagtggt tagtaaaaca tcgctgaata atggcatctg taagagccgg gagatggtag
                                                                     1800
gcatgccatt tttacaggct tcacaagaca gcgtagactc caacacggcc accacagcca
                                                                     1860
tggacggggc aggagggaag gagtccacag gcaccgagtc tggcggtcgt ccataagtca
                                                                     1920
tttcatacag taagtggcca aagcagtgga catccacact ttccaatgta ttgattttcc
                                                                     1980
tgaattgtga aaaataagat cggtagaagg aaggcaggcc caataaggaa ttctcaaggt
                                                                     2040
ccagcagccg gcaagtgtcc ccatcgagca tcacattgga ggcgtgaaga tgcccataaq
                                                                     2100
ggaatccctt gtcatgaaga aacttcagta cctctaatat ttgccgtcca tatgttttta
                                                                     2160
tttgctggag ttccaggccc tgaatcttct tagggttgca gtacttcttt agaaatgggt
                                                                     2220
cttttggttt tgccttgtag atcagatect tcaatgttee ettttegtta aacateetaa
                                                                     2280
ttagcaacgc tgaggattca ttagctgtgg caaaggtaac ccgatagatg taagggtgca
                                                                     2340
aacaagaagg cagaagtttg attagacact gaaaatcttt atctgacaaa tacttgtctg
                                                                     2400
```

```
2460
ggccaaggtc agcccagett aacactagec gtteetttgg etgattttta atetteatea
agaaatattt cttccttatt ctccaaccta tgtctttcaa aggttccacc acctcccact
                                                                     2520
ttggttctga tcggaagaac atggaaacct gttgcaaggc aatctcagta tagtttgcgg
                                                                     2580
aatagttgtt tggatctaaa aacttcttaa ccagctcaca attagacaag atatgatttg
                                                                     2640
ttgtgatcac gttgagatag ttctgaagac ctttctgcct ttcagctatg aattcacgat
                                                                     2700
ccatgttacc aatcaatttt ttgggaggaa gaggtagact taggcctgca atctgtaagc
                                                                     2760
                                                                     2820
tgttgttaag caaatcaaag tcactgtatc ttctaacaat ctgccagctg ttttccacag
                                                                     2880
aaatteetet ttgeaetega ataatattt eegtgtggga etgeaggete tggetegeet
cgatggctgc tgtcagcggc accgtgtcgt ccagcagcac cttgccggct ggcggcttct
                                                                     2940
                                                                     3000
ccatgaagge cateceggga egeceggeeg cegeegeeta gggaegegag gtaggaacee
                                                                     3034
gaggegeega etecegeege eegeeeggae gaaa
```

```
<210> 4932
<211> 1461
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(248)
<223> similar to gi2290725 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4932 cataatagcc atcgacttcg gggagcaggc cttgaacegg ggcattgctg ctgtcaagga 60 ggatgcagtc gagatgctgg ccagctacgg gctggcgtac tccctcatga agttcttcac 120 gggtcccatg agtgacttca aaaatgtggg cctggtgttt gtgaacagca agagagacag 180 gaccaaagcc gtcctgtgta tggtggtggc aggggccatc gctgccgtct ttcacacact 240 gataggtgag gccgccgacc gccactgacg aatctagctt tggcaatttc ttattccttt 300 tcattgattt aaatgtattt attgagataa gtggtttctt cactaattat caaatgtttc 360 ttatgaaatt ttcaggggat agaaggaaag cgcttgtgct cctagcttaa gacaataatg 420 tgttttttct ggggagctgt agttttgtgt ctctgattcc caaagtgaaa agcagtgatt 480 tcattagtag gegattacat ctaggaataa catttggtaa ggccaataaa atagcaqqtq 540 ctttcgttag agatatgtgt gcgtcattgt actgggtcat taaatcttaa gaataaaaat 600 agaatgactt atttagaatt aatgettatt ageagtgaga acaaatgaca gattgtteta 660 tttattaatt tgttctagga tcttattcta ttttattcaa agacaagact aaatgctctt 720 gtgatagcat tcctttcccc atgaaacaac aggaaagctg tatccatacc atacagtgac 780 tggccctccc agtttaaccc aagaccccct ggaaaagcag ctctccttca gggctggagt 840 teetgetget getttettgg tggggataaa ageetteagg ceatgaette egtegtgget 900 ttaaaacago tttgottaco tggcataaaa attgagtggt acctotactg aaaccagtta 960 cataaaacac tgtgaatgac acttcataaa cccattgtgt accttaaaat tgttactgat 1020 tgtttaagac gcgtgactgt cagtggtgaa taaaggaacc aaaagattaa cccagaccgt 1080 ttacagtgtg tttgcatggc agctaatgct tactcacata actgcgaatc tgaaagtaaa 1140 taaggtaagg cetttgtggt ttteettttt aatgtgaeat aaaattttgt getaagaaca 1200 ttgtggaaga gagegeatet getgatggae cagacattea gecaaagegt tgatattgat 1260 cetttaattt gtgeteagag etteagggea tggagtaaag aggagetgee teteatttee 1320 tcagtttatg ccctgaaggc taactgtgga ctgagtattt gcacatgtac ttgtatttga 1380 agtaaatttc tgctacattt gacctgagcc attttcaaag aatacatgta cagtatttgg 1440 gaaaaaaaa aaagtcgacg c 1461

```
<210> 4933
<211> 1065
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1066)...(478)
<223> similar to gi1322603 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4933
gaatccctat gttaaacccg tggtttctca tgaattagat cataatttaa cattgtaaaa
                                                                       60
tttcagaaac tattgtgcta atatttagat ttcaggaagg aatcagacta aatcaattac
                                                                      120
ctccattcat tgttagaaca gaagatataa tagcttacta actgatatga gttatgaatg
                                                                      180
teactatgae acaaaatttg etgtgatttg etaatetgge tacaagtgea gtatttttea
                                                                      240
tgaatgacaa cacacagcat ttccaacttg taacatgaaa ctccagctca taaagagtgt
                                                                      300
attgtgtgac ttgaaaaagt ctgattgtaa ctaagtaaca accgttcccc tgaaaaaacg
                                                                      360
aacaaaatcc attaggaaat caggcacaga cggtattgat cggtttttct tcctttcctc
                                                                      420
ctgtggtttt gtttctcaag acatataggt ggttccaaca gaagccaaca cttgttacaa
                                                                      480
aataacacag ctattttttt cettttettt ttetttatet ttttetegtg gtteetteeg
                                                                      540
tttacgttca ctattcccag attgtcttcc acttgatgga gaggcttgtg ctggctggcc
                                                                      600
ctgctgagcc tgtgtagaag cagcagcagc agcagctgct gcttgttcct gttcctgata
                                                                      660
gtattgagaa geeegtetgt eetetteete ttggagttte tttgetagtt eeaaateaet
                                                                      720
gatteettee gggatttgtt eecaattgat etettggete tgetgttett gttgtagaga
                                                                      780
taatgccata agataatcct gatctatctg atcttgttgt cctttgtata cagtttcagg
                                                                      840
atctgaagga ggtcgaagat gaaattctga gtcacagaaa tttccatcac catctacgtt
                                                                      900
gtgtaggctt teccaaacaa etttetette agtaagaaac eeetggteeg ttaccaacaa
                                                                      960
atacagttga cccttgtatt tggtcatggt gctaaaatga ttattccgaa agaacacaca
                                                                     1020
aagtteteet teetgaaceg tigaagttag ticacataat ceatg
                                                                     1065
```

```
<210> 4934
<211> 1062
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1063)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3)...(513)
<223> misc_feature
<222> (48)...(513)
<220>
<21> misc_feature
<221> misc_feature
<222> (48)...(513)
<223> similar to gi3877201 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

# <400>. 4934 gcaagggccg cagccagcac cgggcggaga gggctaccat ggggaaaatc gcgctgcaac 60 tcaaagccac gctggagaac atcaccaacc tccggcccgt gggcgaggac ttccggtggt 120 180 acctgaagat gaaatgtggc aactgtggtg agatttcgga caagtggcag tacatccggc tgatggacag tgtggcactg aaggggggcc gtggcagtgc ttccatggtc cagaagtgca 240 agctgtgtgc aagagaaaat tccatcgaga ttttaagcag caccatcaag ccttacaatg 300 ctgaagacaa tgagaacttc aagacaatag tggagtttga gtgccggggc cttgaaccag 360 ttgatttcca gccgcaggct gggtttgctg ctgaaggtgt ggagtcaggg acagccttca 420 gtgacattaa tetgeaggag aaggaetgga etgaetatga tgaaaaggee caggagtetg 480 tgggaatcta tgaggtcacc caccagtttg tgaagtgctg atccctcttc cttcccagtt 540 gcccttaaga actgagaaag gacaaagtac tctaagcagc agagcccaca gaggctcgtt 600 cetttgacce ttgtctcctg gtggctatac gaaacettca caatetgcat gctggacttt 660 attacagett cecaageece ateaataaag cecetgttea egetgeactg gtgeatgaag 720 gtgaagtaag gaggcagcta ctccctccac aaataagaat tcgtgcagca gcagttcact 780 ccttaggaaa atgaagagta tttttaagga gatggtatct ccccagtcaa gggcaagttt 840 acagagatga aaccgcgatc ccaccatcac tcaatgagcc agaagccaat ggtgacgtac 90Ò tgttacctga acttactgaa cttgctgttg gaaagatctt tgtgaggatt aggaattagg 960 ttaaaagaaa ttaagaacca tetteaagea aaaattaaae tttatttetg ettaaacaat 1020 aaatacacct gagttagagg cnnntcaaat gctaatacat ct 1062

```
<210> 4935
<211> 5451
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1025)'
<223> similar to gi3413920 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4935
tccaccgccg gagcctcgcc ttcctttctc cctctgcaga cacaacgaga cacaaaaaga
                                                                       60
gaggeaacce ctagaceace gegaaggace catetgeace atgacegaga ccaceaagae
                                                                      120
ccacgttate ttgctegect geggeagett caateceate accaaaggge acatteagat
                                                                      180
gtttgaaaga gccagggatt atctgcacaa aactggaagg tttattgtga ttggcgggat
                                                                      240
tgtctcccct gtccacgact cctatggaaa acagggcctc gtgtcaagcc ggcaccgtct
                                                                      300
catcatgtgt cagctggccg tccagaattc tgattggatc agggtggacc cttgggagtg
                                                                      360
ctaccaggac acctggcaga cgacctgcag cgtgttggaa caccaccggg acctcatgaa
                                                                      420
gagggtgact ggctgcatcc tctccaatgt caacacacct tccatgacac ctgtgatcgg
                                                                      480
acagecacaa aacgagacee eecageceat ttaccagaac ageaacgtgg eeaccaagee
                                                                      540
cactgcagec aagatettgg ggaaggtggg agaaageete ageeggatet getgtgteeg
                                                                      600
eccgccggtg gagcgtttca cctttgtaga tgagaatgcc aatctgggca cggtgatgcg
                                                                      660
gtatgaagag attgagetae ggateetget getgtgtggt agtgaeetge tggagteett
                                                                      720
ctgcatccca gggctctgga acgaggcaga tatggaggtg attgttggtg actttgggat
                                                                      780
tgtggtggtg ccccgggatg cagccgacac agaccgaatc atgaatcact cctcaatact
                                                                      840
```

```
900
ccgcaaatac aaaaacaaca tcatggtggt gaaggatgac atcaaccatc ccatgtctgt
                                                                   960
tgtcagetca accaagagea ggetggeeet geageatggg gaeggeeatg ttgtggatta
cctgtcccag ccggtcatcg actacatcct caaaagccag ctgtacatca atgcctccgg
                                                                  1020
ctagcagece etegteetee ggeaacacaa tggeecetee atetttgtea geeceetgtt
                                                                  1080
                                                                  1140
teteteetge etetetgttt etecatetee tegtettgae tgtttteeet aettgetgae
ttaacccccc atagtgtggg ggacctgcag agaaccatgg cattccctat tccacagtca
                                                                  1200
                                                                  1260
tetttggaca gaettteete tagteteegg gttgggggtg ggtgagggaa tggggtggga
                                                                  1320
gtcgggggaa gtgcagtcct tggagatgta ctggtgtccg tctcccagca tgctctagag
                                                                  1380
aggeggetet ggtgeeeate eteceageae getetgggga ggeggetetg gtgeeeatee
teccageatg etetagagag geggetetgg tgeceeteet eccageatge tetggggagg
                                                                  1440
cggctctggc tcttgccttc ccagcatgcc ctttactaca aagggctatt tttctttct
                                                                  1500
ttcttttgtt tatttatttt tctttgttca ctccctgtag aacttggatg aaatcagtgt
                                                                  1560
ccatggttct ttatgtttgt agtcttgatg tgctcctgtg gtattacttc ccctctgata
                                                                  1620
                                                                  1680
ggacattgta gccagcctca gcactcagtg agttcatcag ggccacaccc agtagagaag
gccaagcaac ctccacttct tcagcaccac acacacgcac acacacacac acgcacacat
                                                                  1740
gegtgtgcac cegegeacge acatacacac acacatatag cagtageage ageageagea
                                                                  1800
                                                                  1860
gcagcagcaa cetttgatca ggagtgagat tttcgggttc tgaaacctgg gacacgagtc
tgtgaatagt cggttttctc agaataattt gaatctgttt tcttagtttt caaatgacca
                                                                  1920
                                                                   1980
tttccctgat gctctgagct tatgatcaca cagagccagt ccatcctcat ttcctggtgg
                                                                   2040
catctgttca tttacctttg tggactgtag ctgatggcac agtgcgggtt ccctaccagc
                                                                   2100
caggggtttc caagggacct ttggaggcca tgcttagaca cattcctgta cctgagaaca
2160
                                                                   2220
caaaaaaaca ctaggagtee acteaaceet ggaggtettt getaattgga attatgtatt
                                                                   2280
gtotgttggg ctgggaaatg tototttoat attgtaagto caggatgaac taggagaaag
                                                                   2340
caatttgttg ccctgatgat aactgatgat tttcaccctc tctagctgag gtaactcaga
cagtgcatga ggtcagtttc ttcttgagaa gcagtgcctt ggtcttgttt ctgtggttgg
                                                                   2400
ttctagecce tgcagagect gggagetgea ggaactgtet gagaaaatet eectaatagg
                                                                   2460
ggagtgggtt cccagaaggg agatctggga ggggtcagga gccactaagt tgcttcactc
                                                                   2520
cttttttctc taattttcta ccttcctctc tgttcctgca gacagttttg cccagctttg
                                                                   2580
                                                                   2640
cttcctggtt actagggtct caggcgtgtc cctgcttgga gagcccataa ggaaattgcc
tgtcttgtgc ctttgtgtct ctcatccagt ctctggctct tgggattctg gtctttgaga
                                                                   2700
                                                                   2760
aatagtccct gagtattagg atacttttat caaaatctag taccagctac ggccaggaaa
                                                                   2820
gggccaggtg gggacctgga aaggcaaagg acaatgttct tttaccacac gttttcacat
ctggcaacat ccttcaattg cgggaaaagg aacttgattt aacagaagaa catggtagag
                                                                   2880 .
cagcatccag aaagtctgtt attcctcttg gattttttga aataatcttc agaggaagga
                                                                   2940
                                                                   3000
aggaaaatcc tattttgggg tatcagtgtt tgactaggga tcatgaaata ataaactgaa
aaaaacttta gagttcagtt gatccaacac tttcctttaa aagttgaggg agcagaggcc
                                                                   3060
catgggatta aatggctggt ccaggtcagc cagcaggtgt agggcctgac aagaacatat
                                                                   3120
tgtttccctg acccctaggc cgtcacacca caccctccat ttcctcatgt tgctgaccag
                                                                   3180
gtgcccatat gatttctaca cttcccaagc cttaccctgg catctttctt ttaaattata
                                                                   3240
totgtoccag gtgototoca cacataggat ggtaatgoca gtoccagggg agggtgtgat
                                                                   3300
agtaaggaag gccactgtta ggtttccttt agaaataaag agatctcagc agcttggaag
                                                                   3360
                                                                   3420
aaatcccaga agcggaactc catcaatcca agaaagagtt gctttgtgga aggtgaagga
                                                                   3480
agacccacag agtgctcagg atgatgctat tgctggagag cgaaagatgg aacagccttg.
                                                                   3540
tccaggcaga acagtcataa gccaggaaat gaaacaaagg aaaacaggtg cctgaatttc
                                                                   3600
ctggggaaac atggcttgtt taaggacttg gagttatgga tggaatttat gggacccacg
tgagcagacc tgaggaaggc tcgatttctt ttgtttcttg gtccactctg tcactctgct
                                                                   3660
                                                                   3720
ctggtcaagc cccatttggt ctacagccca tgagaaggaa tgaggctggt tctgcactct
                                                                   3780
cagcatgcag tecgaaagca tgtgggagtg gggagggaaa gtgagatgaa ttaagacaaa
                                                                   3840
gaacaggtgc catagaagta gatttctagg aatgaagtgg ggcagatctt atctttgtgg
                                                                   3900
attacaggca ctgtactaaa aacaggtttc ctatttaata taaaaagaaa gtgaatcttc
                                                                   3960
ttttggatag aatcatccat tcccatcgcc gcacccccta ccccccaaac acacacac
                                                                   4020
4080
ggggaaggte acagcacaac taaatecagg acaggacatt gtgaccatga cecacecaca
gtcaatacca gaaagatgat tcagagtctg aaggggcgcc ccaggtgcca acaagataac
                                                                   4140
ctctacccc cgactttgtc tctggggtcc tgtttctttc tgcaaagccc aatccaagac
                                                                   4200
tggcatggct cagaggttgt gagaaaggca tggactggaa caatcatgtc cagaggggtc
                                                                   4260
```

```
tggagetttg ttteetgtte accageaaaa aatgtetete ecatttttet gaaagtgget
                                                                     4320
                                                                     4380
gatgtaagaa caggcagaag gaaaaccctt tttgtcaata actctgtcct taaggaatgg
                                                                     4440
teetetggga gggetgtget getagtgggt aceteagtea cacaceeca aeeceaggea
                                                                     4500
gcctctagag ccttcttgct ttcattttcc ttgaatgtac ataggaacaa gggggaaagt
                                                                     4560
ctcttactga agtgcctgaa acccaaagct agagcttcta gagacgccgt tcttcctgtc
                                                                     4620
tcagcttggc cagcctttca acaatgttct ctagtttcaa gctccagctt ctcagaaaga
                                                                     4680
attaaagaac ttgctgttca aattaagtag aaagtgagac tcaataataa ctgaactaca
                                                                     4740
gcaaaaggca gagaattaca gggagaaaaa acttgtactt accagcccaa ttctactctc
ctcaaactga cacacacaca cacacacaca cacacacaca cacacacaca cactcttttt
                                                                     4800
                                                                     4860
tttaggggac taagagagag aagcatgtta ttacatttta ctcatccaaa cagtaatgca
aaaataaaac ggtagaatat gaaaagctca ggatctctcc caaggctacc tactgcagga
                                                                     4920
gggccaacag gtgagatggg aagaatggaa acagggaccg attttgtagc tcatacaatt
                                                                     4980
                                                                     5040
aggacacctt aggaatagca ttgtagtaat ggtgatgaat atgctctgcc aaattcatcc
                                                                     5100
agtotgcacc atottatago tgcccagcac actogactgt tcatgtggtc tctttgtagt
                                                                     5160
gtgagtttgg agtgtcctat tagcctgttc tggttaggaa tgagttaacg gctctttccc
                                                                     5220
tcaaccttag tctagtccca gggctgagga ttcagctgga tccacatggg tcttgaaggg
ttggcattga aggaaggggg aagctttttt gaatcgcttt ttgatcacat aatctgccat
                                                                     5280
tttaagagta agatttgctt tatggaaatc aattcattaa taaaaaatga tattcaagtt
                                                                     5340
gcaataccat ttcacagtga aatattttga gtacaatttt gttgctagaa tagtcatggg
                                                                     5400
caagagtttt atgcaaaatg tttcaattat gttaataaat aagacaatgc t
                                                                     5451
```

```
<210> 4936
<211> 2309
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (74)...(856)
<223> similar to gi6018317 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4936
agacgacgat ttcgtggcgg tgcagcttgg gcggcccagc ggatcgtgcc gcggcggccg
                                                                       60
                                                                      120
agegeageta caggagggtg tecagaagee acaagecatg getgtgggga acateaacga
getgeeegag aacateetge tggagetgtt caegeaegtg eeegeeegee agetgetget
                                                                      180
gaactgcege etggtetgca geetetggeg ggaceteate gacetegtga ecetetggaa
                                                                      240
                                                                      300
acgcaagtgc ctgcgagagg gcttcatcac tgaggactgg gaccagcccg tggccgactg
gaagatette taettettae ggageetgea eaggaacete etgeacaace egtgegetga
                                                                      360
agaggggttc gagttctgga gcctggatgt gaatggaggc gatgagtgga aggtggagga
                                                                      420
                                                                      480
tetetetega gaccagagga aggaatteee caatgaccag gteaagaaat aettegttae
ttcatattac acctgectea agteceaggt ggtggacete aaggeegaag ggtattggga
                                                                      540
ggagctgatg gataccacac ggccggacat cgaggtcaag gactggttcg cagccaggcc
                                                                      600
agattgeggg tecaagtace agetgtgegt teageteetg tegteegege aegegeetet
                                                                      660
ggggacette cagecagace eggegaceat ceageagaag agegatgeea agtggaggga
                                                                      720
ggtctcccac acattctcca actacccgcc cggcgtccgc tacatctggt ttcagcacgg
                                                                      780
                                                                      840
eggegtggae acteattact gggeeggetg gtaeggeeg agggteacea acageageat
caccateggg ecceegetge cetgacacce cetgageece catetgetga accetgactg
                                                                      900
gtaaacaact gctgtcagaa aagggctggg cttgggaagg ggaggtggag gccaggtgtc
                                                                      960
cccagacete taaccettge cectageage etettetttg tggageetet cagtgtggge
                                                                     1020
```

```
1080
agccctcgca tgctggggtc gggccagctc tccccgaaag gtcttgacct gaatgatggc
                                                                     1140
cggggaagcc tgcgtgtgcc cctttcagag acggagcacc tgagatgtgg gaggtgcagc
                                                                     1200
atgttcccct gggcccctca gaaagtcgag cttggaggcc agcctggatc tgtctctccc
ttcccctcct gggaccattc tacctgtgtt ctttgaccct cggagcaggg acaggcaaga
                                                                     1260
caactggcaa gcttgcagct gccctgatgg tgcaggtgca gggaggtgac catgtaactc
                                                                     1320
tgaccaatct gggaagtgga gggtgggete atgggeegtg etetgeeeet gtetgetget
                                                                     1380
cccagtettt egetetgeet geetgeteag aagaggtgge tttggeeeag aggeteagge
                                                                     1440
                                                                     1500
cgggactgag atggacagac ccagggtggg gtggggtcca ggttgggtgt ggactgtcct
                                                                     1560
cactgtcagt ggagccccag aagctagatg ggtaccaggt ggggttaggt tcccagagga
                                                                     1620
ctgagggaat cctgtacagg atgtcccagg gtagatgggg agcaggattg ggacctgctc
tgacagetgg acacatgage cetggatgag tatggtaagg gggtttgaag aatcecetgt
                                                                     1680
                                                                     1740
ccacctccca aatccaggcc cggccccctc tggcttggag agcattccaa gcccccaccc
cacccctaga actgccattc ccaagacctc tgtctcccag ccaaccaccc ttggaacttg
                                                                     1800
cetettgtee tgetggaaag atageagtgt teteetgaet tegeectaet geatgeagee
                                                                     1860
                                                                     1920
aaataaaagg tgtgcccagc ctaacctgtg ccctgtggtt tctggaagga aaggcagact
                                                                     1980
ttaggtggtc ctgcctggac ctgcagatgg tacaatggca tggcttctgt ctaaggtaca
                                                                     2040
gaggggttgg catttcagga cctaggccat cacagaaaca ggttcatggg cagcccctc
agtgagetge aggtatetea cetggeagee gteeagtact getggettee tetggaggee
                                                                     2100
cagecacagg etggggttgg ggtgtgtgga catetetggg eagetettga gtecacettg
                                                                     2160
tgccagatea geagtgccae ecaggetetg ecteetggtg ttattetttg ceaacagett
                                                                     2220
                                                                     2280
tacggccatt ggatgaagcc gcccacttt agaatggtgc ctggcacacg gctggtgcga
                                                                     2309
aatagcaaaa gctttgtgtc cccccacg
```

```
<210> 4937
<211> 1035
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (6)...(609)
<223> similar to gi3413830 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 4937.
attetgagga aeggggaetg teceeggege teggeeteeg gggetetetg egageeeggg
                                                                       60
geogegggga etcegtteca geogeogegt eegaggegga eccgtteete caeeggetge
                                                                      120
gccccatgct cagctccgcc tttggccagg atagatcact gcgaccagag gaaattgaag
                                                                      180
agctccgaga ggccttcaga gaattcgaca aggacaagga tggctacatc aactgccggg
                                                                      240
                                                                      300
atctgggcaa ctgcatgcgc accatgggct acatgcccac cgagatggag ctcatcgaac
tgtcccagca gatcaacatg aacctgggtg gccatgtaga ttttgatgac ttcgtggagc
                                                                      360
taatggggcc taaactcctg gcagagacag cagatatgat tggtgtaaag gaactgcgag
                                                                      420
atgettteeg agagtttgae accaatggtg atggggaaat aageaccagt gagetgegag
                                                                      480
aggetatgag gaageteetg ggteateagg tgggacaeeg agacatagag gaaattatee
                                                                      540
gagatgtgga cctcaatggg gatggacgag tggactttga agagtttgtc cggatgatgt
                                                                      600
cccgctgagg ccgcgagggc ccctccagga ctgccaagct cccaaaggcg gggctaagag
                                                                      660
gagetagage tigeeteace egetgiagee geegagagee eeaggaigta eiggeggaig
                                                                      720
gggcctgcct gcaccccggg gaggcgccca ccccggaccc ccacccctcc gcactgtgaa
                                                                      780
agactaactc ctgcaactgg aaaagcgggg gcgcccgccg acgaggaggc caccgtgcca
                                                                      840
agccggcagg agttcatgcc caggcgccaa gggccatgct gcccagctgc tgctggctgg
                                                                      900
```

```
gtgggccagg gagcccgcca gcagacccca cacagcatgt ccgccccgag gcaaagcctc 960 ccaccttcgc tctgcgcccg tcccagctcg cctcagccct gttatctcag aaccaataaa 1020 aatatttcca agagc 1035
```

```
<210> 4938
<211> 2224
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (501)...(931)
<223> similar to gi4240124 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 4938 agagegecag ccagactgea ggtgeatage ttetggagee gecagetgtg eecaagaget 60 ceteagagee tgetgteeat geceetggta cecetggaaa eeetgteage etetetacea 120 actectect ggeetectet ggggaactag tggageetag agtggaacaa atgeeteaag 180 ccagccetgg cettgecete aggaccaggg geageteagg tecceageea gecaageeet 240 300 geagtggege caccecaacg cetetettgt tggttggaga caggageeeg gtgeetteee ctggaagete gteeceacag etgeaggtaa agteeteetg caaggagaat eettttaace 360 ggaagccatc acctgcagcg tccccagcca caaagaaggc caccaaggga tccaagccag 420 tgaggccacc tgcccctgga cacggctttc cactcatcaa acgcaaggtc caggctgacc 480 agtacatece tgaggaggae atecatggag agatggatae cattgagege eggetggatg 540 ccctggagca ccgtggggtg ctgctggagg agaagctgcg tggcggcctg aatgagggcc 600 gtgaggatga catgctggtg gactggttca agctcatcca cgagaagcac ctactggtgc 660 ggcgagagtc cgagctcatc tatgtcttca agcagcagaa cctggagcag cgccaggctg 720 atgtcgagta tgagctccgg tgcctcctca ataagccaga aaaggactgg acggaggagg 780 accgggcccg ggagaaggtg ctgatgcagg agcttgtgac cctcattgag cagcgcaacg 840 ctatcatcaa ctgcctggat gaggaccggc agagggagga agaggaagac aagatgttgg 900 aagccatgat caagaagaaa gagttccaga gggaggctga acctgagggc aagaagaagg 960 ggaagttcaa gaccatgaag atgttgaaac tgctaggaaa caaacgtgat gccaagagca 1020 agtoccocag agacaagago taacagcacg agaagccagt tggggactgo cocctoctgg 1080 agcageteet gggetgtget etgtttgaag ggggegeeet geteeeetea gateagteag 1140 gaggaagatg actaagggga gggatcetet gggtgatgge etetteetee teagggacet 1200 etgactgete tgggecaaag aatetettgt ttetteteeg ageeceagge ageggtgatt 1260 cagccctgcc caacctgatt ctgatgactg cggatgctgt gacggaccca aggggcaaat 1320 agggteccag ggtecaggga ggggegeetg etgageaett eegeeeetea eeetgeeeag 1380 eccetgecat gagetetggg etgggtetee geetecaggg ttetgetett ecaggeagge 1440 cagcaagtgg cgctgggcca cactggcttc ttcctgcccc atccctggct ctgagtctct 1500 gtottootgt cotgtgoagg ogcoottgga totoagttto cotoactdag gaactotgtt -1560 tetgaagtet teagttaagt ttgagtttat gaetgagtgg eetgtaetgt eagaegtgaa 1620 tgggcctgac gggcaaatéc atcectetét cecteacagt tecaggageg getteéetég 1680 teteccetta etecacaggg ageetecett gecaggaeca gggetgegae ggecatgetg 1740 gggcaggtga gtgctctgtt agetgctccc agtgctgtcc ccaggctgca gttctggtcc 1800 ctggttgtca ggtaggaagg gtgcacttga agcaggtgct catctcggtt ccttaacgtt 1860 tatagiciga coccicacit aggetticot etgecacece ggiccaggga agaggetege 1920 tecogeccat ggteateact ggtetgtetg etetgttgte tgttetttee etgacteect 1980

2040

cccaccgaag gcctgatggc tactcacccc tctgggatgg ctatgggaga ggaggagtga

```
tggggacege cacettteet geaggaaatg tgeecageag etettggtea aageaetgtt 2100 getataaget atetetggga tgeetetagg eeccetteee tetacacace tetgggaaaa 2160 gattacactg tattaaetet egaggagttt eeteaceaat aaacagacaa eeteaaaaa 2220 aaaa
```

```
<210> 4939
<211> 1238
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1171)...(101)
<223> similar to gi473431 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4939
ttttttttt ttcaagtgta gtcacagttt atttctgatg tggctgaatc tagggacagg
                                                                       60
cgggctgggc tgagtggggg gcgtgtcggc gatggggcta gaactccacc ttgcaggccg
                                                                      120
ggaaggegte atcetgeatg gacaccatge tgttgetgee caacaccgtg atgeccageg
                                                                      180
                                                                      240
cctggtgccg ggcgtgcgtc tctgcgtacc acgtatgcat ggccaccgag tcgaaagtgg
                                                                      300
ggatcagggt cacctgcagg tcacggtccc aatgctgctt gctggccagt agcgcgtcca
                                                                      360
ggacggccg catgcettee teettgeget ggteetggee actgatgaeg tageagageg
                                                                      420
egegeaegeg etggaagaac teeteateea eeaggtggge getgeteeeg etgggeaggt
                                                                      480
aggccaggtc caggtagacc ggggacttgg gtggggtggc tgacaccccg ggccggctgc
                                                                      540
tggctgaccc cgacgggcct cgagtggcag tcttgggggt tgaggacttt ctggacaggg
                                                                      600
gtgeceggee tecettetea etgggeteae teegggeaet gagtggtegg etggeaeggt
ccccaccage aageceettg gttttggcag cagecactgg agtggetttg ggggeggcag
                                                                      660
                                                                      720
egegtgagtt ggggegggee aggggettee gggtgegget gaegttetee gtttgeegtg
etgtettggg gggeageate teggggteea ecatgeagat getggatggg teaggeagtg
                                                                      780
gtgggggac cttgaggggg tcaggcaaag ggtcgtggcg agggactcca aagccctctg
                                                                      840
                                                                      900
tgtettegte tgagtetgee geaeeggggg ceaggggeae gggateegag teagaeaggg
                                                                      960
tgggcaggga ctcgctgacc gatgtgggtg gcgtctcctc ggcccccagc ccacctgccc
                                                                     1020
gtteetgtga eegggeactg etgteatteg agetgeeggg ggaegeaggt geeggtgeea
                                                                     1080
ttggcaccgc cttgcgatgc tcaaattcac agggtgacac caggcacagg tccacatcgt
gtggggaage egagegeege geeeggggge caegeagegg gaggeteage ceageeteae
                                                                     1140
tggtgggggc ggatggcggc agcaccgtgc tcaaaggaca ccgacaggga ctcgtccacc
                                                                     1200
tcggtcgagt gcggggagcc cacctctgcg ggtagtga
                                                                     1238
```

```
<210> 4940
<211> 1375
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (546)...(748) <223> similar to gi4098993 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 4940
ageggeegeg tgeagggget getggaggag gaggeggegg etegaggeeg tetggagege
                                                                       60
accegteteg gagegettge getgeeeege ggggacaagg eeeggaeggg egeegeegge
                                                                      120
cgccagcgcc cgcccgtctc gcagcaagag aggtggagaa gagcgagtac ttgagaaaga
                                                                      180
agaggaagaa gatgatgatg aagatgaaga tgaagaagat gatgtgtcag agggctctqa
                                                                      240
agtgcccgag cagtgaccgt cctgcaggtg cccagcacca ccagcttaac ggcgagcggg
                                                                      300
gaceteagag tgecaaggag agggteaagg agtggacece etgeggaceg caecagggee
                                                                      360
aggatgaagg gegggggeea geeeegggea geggeaceeg eeaggtgtte teeatggeaq
                                                                      420
ccatgaacaa ggaaggggga acagcttctg ttgccaccgg gccagactcc ccgtcccccg
                                                                      480
tgcctttgcc cccaggcaaa ccagccctac ctggggccga cgggaccccc tttggctgtc
                                                                      540
ctcccgggcg caaagagaag ccatctgatc ccgtcgagtg gaccgtgatg gatgtcgtcg
                                                                      600
aatattttac tgaggctgga ttcccggagc aggcgacagc tttccaagag caggaaattg
                                                                      660
atggcaaatc tttgctgctc atgcagcgca cagatgtgct caccggcctg tccatccgcc
                                                                      720
tegggecage cetgaaaate tacgageace acateaaggt getteageaa ggccactttg
                                                                      780
aggatgatga coccgatggo ttottaggot gagogoccag cotcaccoot gocccagocc
                                                                      840
atteeggeee ceateteace caagateeee cagagteeag gagetggaeg gggacaeeet
                                                                      900
cageceteat aacagattee aaggagaggg cacecetettg teettatett tgeecettgt
                                                                      960
gtctgtctca cacacatetg ctcctcagca cgtcggtgtg gggaggggat tgctccttaa
                                                                     1020
accccaggtg gctgaccctc cccacccagt ccaggacatt ttaggaaaaa aaaaatgaaa
                                                                     1080
tgtggggggc ttctcatctc cccaagatcc tcttccgttc agccagatgt ttcctgtata
                                                                     1140
aatgtttgga totgootgtt tattttggtg ggtggtottt cotcoctocc ctaccaccca
                                                                     1200
tgcccccctt ctcagtctgc ccctggcctc cagcccctag gggactagct gggttggggt
                                                                     1260
tectegggee tittetetee tecetetitt etitetgitg attgtegete eagetggetg
                                                                     1320
tattgctttt taatattgca ccgaaggttt tttaaataaa attttaaaaa aaaaa
                                                                     1375
```

```
<210> 4941
<211> 747
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(748)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (711)...(390)
<223> similar to gi3023044 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4941
ttttttttt ttaatcaggt gaaaatattt tattttgacg tgctttttct tgagtgcctg

```
aatgtggtgg ctcttagggt aaccccagaa tcctcactgc ggcaacaaga cctggccacc
                                                                      120
                                                                      180
acceteacet egaceaceae ggeetteget geageeceae tetgaeteee egggggetge
                                                                      240
tcacgtgcca gcacccactg gccaagcatc ctccggcagg acccaagtcc tctgtattca
gaggccgacc ctgctttcca gagactcacg aggtggcaga gagtcaggct gtggcagggg
                                                                      300
                                                                      360
cccctgtgta tcgaggagag gaggaagagt ctgcagaggt ttctagggaa ggagatagtg
                                                                      420
tggaagtgac tgtggctctg gtcctgcctg ggaggagatc tacaggggag gggcctggcc
                                                                      480
ttgggctggc cctgccctgc gtgggatctg tgccctgcgt gggatccctg ccctgtgtgg
                                                                      540
ggtgcgtggg gtctgtgccc tgtgtggggt gtgtggggtc tgtgccctgt gtgaggtgcc
                                                                      600
tgccctgtgt ggggtgtgtg gggtctgtgc cctgtgtggg gtgcgtgggg tctgtgccct
                                                                      660
gtgtgggttg cttggggtct gtgccctgtg tgagctgcct gccccgtgtg gggtgcgtgg
                                                                      720
ggtctgtgcc ctgtgtgggg tgcctgccct gtgtgggatg catggggant tccccgcact
                                                                      747
ggacaactat ctacaaangg ggggggg
```

```
<210> 4942
<211> 1641
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (72)...(342)
<223> similar to gi3047103 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 4942 ggaattcgag gaaactagag ctggcagaaa gggtggacac agattttatg caactaaaga aaagaagaca atcaagtgag aaggaaaatg actcaggcac tttggacacg gtaggcgctg 120 180 tggttgtgga ccacgaaggg aatgttgctg ctgctgtctc cagtggaggc ttggccttga aacatccggg gagagttggg caggctgctc tttatggatg tggctgctgg gctgaaaata 240 300 ctggagetea taaccectae tecacagetg tgagtacete aggatgtgga gageatettg 360 tgcgcaccat actggctaga gaatgttcac atgctttaca agctgaggat gctcaccaag 420 ccctgttgga gactatgcaa aacaagttta tcagttcacc tttccttgcc agtgaagatg gcgtgcttgg cggagtgatt gtcctccgtt catgcagatg ttctgccgag cctgactcct 480 540 cccaaaataa gcagacactt ctagtggaat ttctgtggag ccacacgacg gagagcatgt 600 gtgtcggata tatgtcagcc caggatggga aagccaagac tcacatttca agacttcctc 660 ctggtgcggt ggcaggacag tctgtggcaa tcgaaggtgg ggtgtgccgc ctgggagagc 720 ccagtgaact gaccetteag getgagtgtg aagegtetea gaggeattte agaacetgag cttttggggg tttttaactg aagttggttg ttttatcttt cttgttttat aattcctatt 780 gcaacctcgt gcactgctcg agacacaagt gctgctgtag ttagcgctta gtgacacgcg 840 900 ggcctttggt gggtgagcgg gactgtgtgt gagtgtgtgc gcgtatgtgc gcacatatgt gtatgtgtgg agtatgtgtg tttgcttctc cgtggatgaa atagaaactc ctcattgtgt 960 1020 gaccaggaat ggttaaatca tctttacaaa atgtgtgctt taactgttta caagtaaaac 1080 ctaaagttgc aggaaacatt ttttatttcg taaagaggta ccaactgtcg ctgatgtgat atgtcagaac tgaagagtaa atctacttgt ttaaatgact tgacagtggt agtgctccat 1140 ttaataacag taataagtaa taaagtgttt ttatttgtta accagtttaa gtggatcctg 1200 1260 tggtaactta aactgttgtt ctcatccctt atatggggca tttttcttta acaaagaatg gtttcagtga aacaatctag cagagaatta atgtcagaac ctttttaaat aatagtctga 1320 1380 ttgatacagt ttgtacttat ttcatcaagc ttttctaagc ttaaatattg catagcttcg 1440 agctgtatgg actatattat gaaagaatat gtaaagagaa catacagtaa tgcacagtcc ttaatttgtg tataatggaa agttatttac aatataacac tgtaaataag aaagcaaagt 1500

```
ttatgggaaa attcaatatt atctttgttt ttgtttaaat atattttaa gataaaggca 1560 caaaaataaa agaagcgtat tactgggtat agtatgtgac tcctcttctc agactaataa 1620 attatcttt gaatccttaa a 1641
```

```
<210> 4943
<211> 1558
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1475)...(886)
<223> similar to gi5649176 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 4943 ccacctcaga gcaaccacag ctgggcggtg ctgttcgacg ggcagagcgg ctgcatctgt 60 120 taccgccctg aggagcacca ggtctgcttc ctccgcctga tggaggacag tgatcgggag 180 accetgegge tgetggtgga tacetecaag gtecaagagg ettgggteee cageeaggae acceaceaca cecaggaget getggeagtg caggggagee tegaagtgga eccegeceag 240 300 gegggggett tggtgeageg eetgtgeatg aggaceeeca tetaetggge eeggegagea 360 gaggggcccc ggagacagcg gctgatttat ctctgcatcg acatctgctt cccgagcaac atctgcgtgt cggtctgctt ttattacctc ccagactgag cccccgacct ggcccagcct 420 480 ggcccgtccc caatccagtg ggctggccag gccacctgca ccagggagga cagctgctgg 540 cagggactaa taaacccttc cacctggcca tggtggtggt gttctctatg gaccgaggcc 600 ctgaaacgcg ggcagggagg ggcagagaac gcactagctt gggggtgggc accagcctca 660 gacccctcag cagctttggg ccctcggccg actttcccag gcagtgcagg ctagcccagt 720 ccaggagtgt gcagcctggc ttgggtcgag ctctgtcaca tctggataag caactggggg 780 ctgagagtec cagggcagec tggcccagca ggtcaaggcg ccacaggggg ccatcaggte cagetggege aggeeggeag gggagggtet getetgaeet gggtgetgea tgggteeete 840 cagetgecae caeetgeaee aggeagtece gaggggteae aggetageee ageacaetgt 900 960 cattgaaggc caggcagaca, acagcettet ggtggccgcc atactetete ttgatetete cagtetecae acaccagage egggecaggt tgteegagga ageagtgaeg atgtaetggg 1020 agtecceega gaaggegeag ecceacatee ageegegga ggaeteceeg gggttgeege 1080 tettgatget cageteegte ateagggaga agttggaegt cetecagate ttgcaegtet 1140 gatcagccga gcaggtggcg aggagcgtgg agtcggggct gaagcgacac tgcagggcgt 1200 agegegtgtg ggeagggate ttagtettgg ggatgagetg ggteaceteg teaceaatge 1260 ecceegteag attecagaea tageagttte eggtgetatt gaeagetgee atgtagetgg 1320 cgtcgggatc gatgtgggcg gacgtgatgg agacctcggg ctcagggatc agctgctcgt 1380 tgtggtctgt tttcaagtcc cagatgtgga tagccccgct ctggtcaccc acgatgagct 1440 1500 ctgcctggtt ggggtgcagc accaggactc ccaggtgaat gccttggagg tcacaccgga cegeageatg attgetgetg caggitacea geacatgegg atgitatgate teaactee 1558

<sup>&</sup>lt;210> 4944 <211> 355

<sup>&</sup>lt;212> DNA

# <213> Homo sapiens

<220>

<221> misc\_feature

<222> (357)...(215)

<223> similar to gil565257 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

# <400> 4944

```
acttatagaa aaggtaaagg aaaccccaac atgcatgcac tgccttggtg accagggaag 60 tcaccccacg gctatgggga aattagcccg aggcttagct ttcattatca ctgtctccca 120 gggtgtgctt gtcaaagaga tattccgcca agccagattc gggcgctccc atcttgcgca 180 agttggtcac gtggtcaccc aattctttga tgtatgggcc gaggggcagg ctccaatttt 240 caagcacacg aaggaaggat ccatcacctc caccaggatc tcgatcagca cgggctcgta 300 ctctgccaca aactgatcac actgctctg gtaagggtct ggcaggaagc tgcag 355
```

<210> 4945.

<211> 1918

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (3)...(811)

<223> similar to gi5912153 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

# <400> 4945

```
gcaaggtgac cgcccacgg cggccccagc gctacagcag cggccatggc agcgacaaca
                                                                       60
gcagcgtgct gagtggagag ctgccgcccg ccatgggccg caccgccctt ttccaccaca
                                                                      120
gcggtggcag cagtggctat gagagcctgc ggcgcgacag cgaggccacc ggcagcgcct
                                                                      180
cttecgeece tgaetecatg agegagagtg gggetgeete eccaggegee egeaceegea
                                                                      240
gcctcaagtc ccccaagaag agggccacag gtctgcagcg gcggcgcctg attcccgccc
                                                                      300
cactgeeega caccactgee etgggeegta ageceageet eeeegggeag tgggtggaee
                                                                      360
tgeceeegee eetggetgge teeetgaagg ageegttega gateaaggtg taegagateg
                                                                      420
atgacgtgga gegeetteag eggeeeegee eeaceeegag ggaggeeeee aceeagggte
                                                                      480
tggcgtgcgt cagtacaagg ctgcggctgg cggagcgcag gcagcagcgg ctgcgggagg
                                                                      540
tgcaggccaa gcacaagcac ctgtgtgagg agctggccga gacccagggc cggctgatgc
                                                                      600
tggageetgg cegetggetg gageagtttg aggtggaeee ggagetggag eeegagtegg
                                                                      660
ecgagtacet ggeggeeetg gagegageea eggeggeeet ggageagtge gtgaacetgt
                                                                      720
gcaaggcgca cgtcatgatg gtcacctgct tcgacatcag cgttgcagcc agtgctgcca
                                                                      780
teceggggee geaggaggtg gaegtetgag getgggegee ggaeaagagg aggggggtg
                                                                      840
cagcgggctg gaggacggga cgtggggacgg agcgaggatg tggtgggggc tgcggggga
                                                                      900
ggatgcggag gggtttctgt gcaggacggg agtctcagag aggagacgga gtgtggggga
                                                                      960
gggagggccg gccacgcggt ggacagagcg agggtgccag ggtgacccga agaccgtcac
                                                                     1020
caccegacag caacgcaagt geetttgace ttgatttgga ettttetee ttttgcattt
                                                                     1080
ggtgctacag acttgagaca ccagcagaag ttgtgttcag cccggccccg ctgcgcctgt
                                                                     1140
```

```
ccgggccggg gctggcgccg gttgtgtttg tgtccacctt gccttctttg cagccaagca
                                                                     1200
gtttttgtgg agtgggactt acctgcacgc cccaggggtc tttcaggatt caggatgact
                                                                     1260
                                                                     1320
tttcttttac aatggtttcc tctcggcaga gcccgggttg tggggggatct gtgtggggtt
                                                                     1380
ctcaacgcag atccatcctg gggtctcccg ggcagggatg gctgacctcg agtcccctcc
                                                                     1440
cttcccgaga acccgctctg tcccgagggc agctaacaag ggctgagccc caggtacagg
                                                                     1500
ttqcctcctc cacggcagga atttttacca aaaccacaag caaaaaacaa aacagaccac
cacgaccaac aacaaagatg gggggtaggg ttttgtaaag gttctgttag gttcatattt
                                                                     1560
ttatatcatt ttgcccataa atgcggaatt tgccgtggga atttgaagac aaatgatcta
                                                                     1620
                                                                     1680
tgtttttatg gttttctagg gaaggtgttc tgggggccgg gctctctcca gctgtgggag
geetgeteee tetgggggge accetgggea gggtgggggg geettgggag gegettettg
                                                                     1740
ccaaatgcag acgaggggtg agcctgccag cgtttgcgac gtccccgcac gacaggctca
                                                                     1800
tactttctga ggatcgtgca tagcatagga cgtctgaacc tttgtacaaa tgtgtagatg
                                                                     1860
                                                                     1918
acatettget acagetttta tttgtgaatt aaagatgeat egatggttaa aaaaaaaa
```

```
<210> 4946
<211> 491
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (491)...(384)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4946
gctgaggaat tcggacgaga gaaataaaac gatctagtta ttgaaaaacc ttaaccccta
                                                                       60
tggacacact cacatacaca cacaaaacac gtattcccaa cgtgattttt cctaccgctg
                                                                      120
agetgetttt acctatgetg ttttetetae etggaaagee ceetettget etectaggtg
                                                                      180
tcactgccaa aatactacct ttcctataag gtccaggtat ataagcacca tggacattat
                                                                      240
ggagagagta gggggcatgg ggtccacatt ttgtatcact gtccaccact cccagcctgg
                                                                      300
accatctcac actgagtccc tttagtattc tgattcgtag tttacttatc ctaaaaaatg
                                                                      360
ggtcagtaaa cetettgeta tggcaeggtg getcaegeet gtaateecag caetttggga
                                                                      420
ggctgaggcg ggcggatcac ttgaggtcag gagttcgaga ccagcctggc caacatggtg
                                                                      480
aaaccccatc t
                                                                      491
```

```
<210> 4947

<211> 1500

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1501)

<223> n = a,t,c or g
```

```
<220>
<221> misc_feature
<222> (1503)...(1149)
<223> similar to gi4884370 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4947
                                                                       60
ttttttttt ttgtacaata actgactttt gcaattattg tgtaatttac acaaggacaa
cccccaatt cccacacttc gtttttatat ttctgccttc attattcttt caatatctac
                                                                      120
                                                                      180
gtcaacagaa atcgtttctc ccaataacat atgtggtttg atcctcagcc aggggcgcac
aggeectaca agagteecag ecetecaaca egggacacet ggaceeteec ecatttggac
                                                                      240
tgccagccct tggtctgttt tgttaacccg gggcttctnc ctgggccccc tggtcacccc
                                                                      300
ctggaagacc gtccggtaag gtagggaaat ggccaaacag gatctgtgtg atgtgtcaac
                                                                      360
                                                                      420
tetqaqtaaa tecaaqaggg etgeetaggg ageeceeagg etggagggat tgagaggeea
qqqctqtqtc tggttccatt tcaaagaatg ctgtgatgca ttagcagcgt tctgctatgg
                                                                      480
gcaacaaccc attagaagca cctggaaggg gggttttggg aaacgggctc agaaaggagc
                                                                      540
aaggtgtgte egtteeatte ttgeettagg tggetgttee gttacecagg etatgetgte
                                                                      600
teagtggeea ggtggetgag gaggaagtet gaaggeegea tagttgeaag tggetteeet
                                                                      660
agggcctgca ggggacagca taggcccaaa gctagaggaa gcttggaagg gcgcccacgc
                                                                      720
tgggteetge ggggetetge atactgeagg ceaceatgge getageteet taccetetgg
                                                                      780
                                                                      840
agtetgtete atecaggaga agacagetgg etggeeteag agegttacat geaacteggg
tgaaaacatt tttacatgac acagacacac aatgggcttt acctctggat aaacttagaa
                                                                      900
actttccatc caaacgaaaa gggtgtatct tctgtatgtt gccaagaagc ctaaactgag
                                                                      960
tacaaggacg atcttacttt aatcaagttc cagaatgagg gtacacagct tcgaaaagca
                                                                     1020
                                                                     1080
gtctgtagca gaagatgcaa gggtgtgtgt agccatgttt ccagaatata ccaaaggaaa
                                                                     1140
cacacacac cccagtgtgg ccttttgcga accctcgatg ctgctccata ctgggggcag
                                                                     1200
geggetactt egtecagetg actttgggaa tgtegtaatg etcegtgagt gtgtecaggt
gtotgttgåa gtoctocact ototgettgt gggttttgga tgccttcttt aggatccttt
                                                                     1260
ccatttgccg cttctcctgc attttctcga aggccgcctg ggccggggtc cgcttgtcca
                                                                     1320
ggccgcgccg cttctcctcc tcgttctttt tgctcgttcc cattgcttcc aggagtttcg
                                                                     1380
etttgtettt gteettettt ttettettee gettggteae teecagetet gegaegeett
                                                                     1440
teagetteag gggteeettt tggaeetget egtaggeete catgaeaete teeagtgett
                                                                     1500
```

```
<210> 4948
<211> 885
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(886)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (860)...(446)
<223> similar to gi3885828 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 4948 tttttgaggg tcaaatatct ttaaataaag tgccaggaac aataaatact gtacaggaag 60 agagtgcacg tgaacgtcca gatctgtggt ttcaacctcg agactccaag gacctgcaag 120 gggggtggac aagggacccg ggatcaggga ggctccgggt agacaagagg ggcaggactg 180 gggttgcaga ggcaagggcc caggtaagtg ggctgaggga tcccagccac agtaggttcc 240 gtatcttggg atggaaggaa gctaaggget cccccaggga tttggccaaa ctagcctggg 300 gtgagageet gggedaaggg teaagggtea ggateeeaga ggagggeea gggetggaag 360 atccaggaag cactggcctg gtttgggagc ctggggttaa aggggagccc gtggaggccc 420 caggggtgtg gtgacccagg ggctcacgag tagctctgat gctgttggcg ccggcgggca 480 gagegeatet tetegaaceg ggeetecate teetecagea etegeggtet gtaacggaca 540 accagettea eegageeetg ggeegeette ageageteea eegeettete atgetgetea 600 ccctcaacgc tcacaccgtt caccgacaac agttgatccc cacgcttgag gcctccatgg 660 eggteageea caccecetgg gatgaceegg gagatgtaga tgggegagtt ttgetetttg 720 ccacccatga tgttgaagcc taggccctca tccgtcttgg gtagctccac taccctggga 780 tgtgcgtggc cctcgctggc tgtgaaggca gccactgtgg cctttgctgt ggcatgggct 840 cggatetege tegtgeegaa tetgeagega atteetinti ecaca 885

```
<211> 1258
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1256)...(586)
<223> similar to gi1205993 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 4949

<400> 4949 ttttttttt ttattggact gtaggttttt attaaaacaa acatttctca tagctctaag 60 caaagcatta gaattcatca agcggactca catcttttct ctgcacagag agggctgaaa 120 agggagagaa agtcccttat gtatgtctag atttggtaaa gcgaaggatt tcaqcqaatq 180 agtéactgag getatacaeg titigeaaatt gtaaggeact ggegggeaga gageacagat 240 aaaggactic tggggtcccc catectgtcc agcaacctcc cagctcacac cttagcttct 300 accaagaagg gtgaacacag catccctgct atcttcactc agaccccaga agacacagga 360 aaccgcacag ctccactccc accataactt attaggagat aagtcacatt ttatcaactt 420 gccatcgcgc ctcctataga ttatacttcg gtaaacccaa tctgtataaa ttcctttgta 480 ctttgtgcac tttaaatgcc acgattgtga atcacacaag cattgcccaa tttgttgaaa 540 gcatttttac tggaacctca aaggcccacc atgtggggag caattattt ttaataccca 600 ctgggcagga cacgccggtg cccccaaggc cgcagtagcc attggggttc ttgctcaggt 66,0 actgctggtg gtagtcttcc gcatagtaga aagtctgtcc ctcccggatg tcggtagtga 720 tggggccgaa gccgtgctct gaaagaacct tttggtagtt ctctttggag ctcagggctg . 780 cetecatiting citingeagang gregggtaga the transfer gracing coategetest 840 teceetggeg catacettgg gtegggtegt gattetecca gaagacettg ageagtteet 900 caaaactcat gtgttctggc tggtacacca ctcggacgac ttctgcatgg ccagttttt 960 ctgagcagac ttctttataa gtaggatttg aagtatagcc tcctgcaaaa ccaacttgag 1020 ttgaatacac teettteaag acceagaatt teettteage teeceagaaa cateecatte 1080 caaatacagc catctgtgtt ccctctggga aaggttcgac tgttctgttg ccattgacat 1140

gatgtttggc cgctacaggg gtctgttcct tccggcccgg caaggcctcc tgggggctga 1200 cgatgttcga ggccgagttg cccatcctcg ggacgggaaa gaggctgtgg aggaggag 1258

```
<210> 4950
<211> 1188
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1189)...(496)
<223> similar to gi2815610 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4950 tttttttttt ttattattca ggcaatttat taaacattac ctatagaata ttatgatctg 60 tattttacag aagttaaaaa gtgatgtatt agtattcata acaactgctc catgcaggag 120 180 taatagaagt caacattaag cccaactcta ttttcagacc aaccatgcaa ctttagatca qaqqacacat qqqactetge atettaatte etaaatttae agteaaagae atttteagag 240 300 ataagtatta tgaattcaat aagaatctaa agtaagttet taaggeaaat agetataaaa gagaagaatc cttagtctct catcttctaa aaacagcttc acaaataatt tggaaaatca 360 420 qcctaaaqqt aaataqaaac tqcatttccc ctccattctt gaagccaatc tttttcaaga 480 aatgactaag cagcacctgt tgttgaagac agcaataaag cctgaacctg acactcaagc tttggtacag gatcagtttt ctggcttgga ctggtcagga gtcacttcac tcagaatctt 540 cattagtgat tttaagegat tgtgegttag cactatette tettteaget etgeaatett 600 ttctgataga/ggaacatttt gaatatccat ctctgatgca tttactatgg cttttgtttt 660 taagagatag cacaccattt tgtcactgga aaggcagaag tgacctctca aggcagccag 720 ggcagcatgg gtagaataca gatggaaacc aacgggaatc ccacaagaac cacagaataa 780 aaggttgtaa gtactgcctt tgagtgaacc ttcaatgcca actaggaagg gcgcttccaa 840 aacgacgtta tttgtaactc tggagaagac cacggccccg agggaccgcg acaggtccca 900 ggcgaggtgc accgagtcgg cgagcactgc gtgacactgt gcgcactgga acacagcgca 960 ceteteagge tgeageeaag aeggeagetg egggeeggeg getggeteet eageeeceag 1020 ccctgcgggg ccgagcggcg aggacccctt caccacctgc gtatcccact ccatggaggt 1080 1140 cgtaaaagaa gcttggtcaa tcgccctctc agtgccacca caaaagtccc cccggggcgg 1188 cgttgcacaa cgtgagcgat gccgcagcgg ctgagccgcc atcttccc

```
<210> 4951
<211> 1251
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1194)...(366)
<223> similar to gill77358 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4951
                                                                       60
tttttaagag gttcatgaca caaatatatt tatattaggt gaatcaatca cccaggatac
ccaagatctg atactttcac aaactgcttg gaggcaactt aagtatggaa gaagcttcag
                                                                      120
aaccagecca getttetget etetggetee aggetgeate etttttaaet atttaatgtg
                                                                      180
gegtggaaaa tgteageata atgaggettt eteateteaa tagagaacet aggaaggaea
                                                                      240
aggccgaatt aaaaaaaaaa tcttcattaa agaatttaat agggagttga ttatgttgta
                                                                      300
gaatcatatc gtcctattct gtgacacatt agaaacataa actttagggc tttttcatct
                                                                      360
ccacagcata gaggtetgat egettetgte taaaaaeggg gatttgetgg egtattteag
                                                                      420
ccagcitett caggietatg tetgaataca egatigette tietgigeea gettiggeta
                                                                      480
gaacetecce ccaagggtte accaeggtge tgtgteeeea ggeaacatag gaggetttgt
                                                                      540
catcccgggc aggagaggct gtggccacat acacctgatt atcaacagcc cggcttcgct
                                                                      600
gaagtaactc ccaatgggct ggtccagtgg tcagattaaa agctcctgga tataccaaca
                                                                      660
gctggcagcc tctctgtgcg tagatttgtg caagctctgc aaaccgcatg tcgtagcaga
                                                                      720
tgcccagacc cactctgcag taaggagtat caaatgtgga gaaactatca cccggactca
                                                                      780
atgttttaga ttcttgaaat gtaatttttc caggaacatc aatgtcaaac agatggatct
                                                                      840
ttctatactt tgctagtaaa gttccatcag gcccaaacac agcacaggtg ttatataatt
                                                                      900
teccageate etetteaggg atagageete caatgagata tatgetgeat teetttgeta
                                                                      960
cttcagaaag cttctgtgtg gattcaccag gaattttctc tgcatattca ggaaaatatt
                                                                     1020
tegetecata tggagaatta aageatteeg geaaagaaae tattttgget eettgegttg
                                                                     1080
ctgcctcccg gatgaagcta caagcgcgag tgacgttatc tgatttgatg gaagaaatct
                                                                     1140
gaagetggat gagggeeaag eggaaagagg teatgaetet geagaeaage accaeetgeg 🕥
                                                                     1200
gegeggaatg agegetggag ateeggegga eegeggegte getacaegaa a
                                                                     1251
```

```
<210> 4952
<211> 1073
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (211)...(705)
<223> similar to gi687809 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4952
tegetgtete gggeegaete tgacececat gggeeacaca cetgtggeea tgteetgaat
                                                                       60
gtgatcattg gctctaatgt gctggcgcta gctgaggccc agcggcaggc cgaggcactg
                                                                      120
ggctaccagg ctgtggtgct gagtgcagcc atgcaaggtg atgtaaaaag tatggcccag
                                                                      180
ttctacgggc tgctggccca tgtggctaga acccgcctca ccccatccat ggctggggct
                                                                      240
tetgtggagg aagatgeaca geteeatgag etggeagetg agetteagat eccagacetg
                                                                      300
cagctggagg aggctctgga gaccatggca tggggaaggg gcccagtctg cctgctggct
                                                                      360
ggtggcgagc ccacagtaca gctgcagggc tcgggcaggg gtggccggaa ccaggaactg
                                                                      420
gccctgcgtg ttggagcaga gttgagaagg tggccgctgg ggccgataga tgtgctgttt
                                                                      480
ttgagcggtg gcaccgatgg gcaggatggg cccacagagg ctgctggggc ctgggtcaca
                                                                      540
cctgagettg ccagecagge tgcagetgag ggcctggaca tagccacett cctageccae
                                                                     600
aatgactcac atacettett etgetgeete cagggtgggg cacacetget geacacaggg
                                                                     660
```

```
atgacaggta ccaatgtcat ggacacccac ctcttgttcc tgcggcctcg gtgatggcat 720 aggtcacatt ttgggagttc agaggaggcc tacaagggca aggtcagatg gcagagcaag 780 gttggtcctc agggcctctc taagcettag ggcccctcct ctccttggcc ttggctgttt ggttaactgt cacettccac tcagggcctc tgctctatat ctattccctt ccagccagac cgttcccgtg cttctccctt gggcagcctc tctcttgagc ccctcaccct ggttcttctt 1020 gtgaagcgag aatgtctgaa aataaatagg accatgccat gggaaaaaaa aaa 1073
```

```
<210> 4953
<211> 658
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9) ... (499)
<223> similar to gi4760473 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4953
ctaatgagat aatcaaatat aacctgcaga agaggactgt ggaagatcga atgctgctcc
                                                                       60
caggaggggt aggccgagca ttggtttacc agcactcccc ctcaacttac attgacctgg
                                                                      120
ctgtggatga gcatgggctc tgggccatcc actctgggcc aggcacccat agccatttgg
                                                                      180
ttctcacaaa gattgagccg ggcacactgg gagtggagca ttcatgggat accccatgca
                                                                      240
gaagecagga tgetgaagee teatteetet tgtgtggggt tetetatgtg gtetaeagta
                                                                      300
ctgggggcca gggccctcat cgcatcacct gcatctatga tccactgggc actatcagtg
                                                                      360
aggaggactt gcccaacttg ttcttcccca agagaccaag aagtcactcc atgatccatt
                                                                      420
acaaccccag agataagcag ctctatgcct ggaatgaagg aaaccagatc atttacaaac
                                                                      480
tecagacaaa gagaaagetg cetetgaagt aatgeattae agetgtgaga aagageaetg
                                                                      540
tggctttggc agctgttcta caggacagtg aggctatagc cccttcacaa tatagtatcc
                                                                      600
ctctaatcac acacaggaag agtgtgtaga agtggaaata cgtatgcctc ctttccca
                                                                      658
```

```
<210> 4954
<211> 570
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (4)...(247)
<223> similar to gi4539520 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4954
                                                                       60
ggggattatg tagaaagata tgatcccaaa acagacactt ggaccatggg ggctcctttg
agtatgccca caaatgctgt tgggggctgt ctccttggtg acagattata tgctgatggt
                                                                      120
ggctatgatg gacagacata ceteaacaet atggaateet atgacecaea aactaatgag
                                                                      180
tggacacaga tggcttcctt gaatattggg agagcaggtg cctgtgtggt agtcatcaag
                                                                      240
caaccttgac ttattgatat tttacttgga aagattttac ttgctggagt ggttattttt
                                                                      300
atattgaatg gcaagaatga gaacttccag agatgaaaac tettcaagaa caaggatete
                                                                      360
tgtagcgtta cctactgatg ttgaaagagt tagtagatca aacagaatag taggaaacaa
                                                                      420
                                                                      480
gaaaacatta aacttataca ggaaaaatgt ctggccatat gttagttagt tcgggaatgg
                                                                      540
ttattggtaa tttgttttgt attatagcat acaataacta gagttaccaa aggcttgttt
                                                                      570
tttcttgagc agttgaaagg agagaccaat
```

```
<210> 4955
<211> 1371
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1285)...(757)
<223> similar to gi3417425 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4955
ttttttttt ttaaaaaggc acataaaaat atttttattt tctataaata cattaggaaa
                                                                       60
tgtatttctt cccaacccag tccaccccat taactcaatt ttttctacat aaaaaagatg
                                                                      120
ctaataccac cctcacctgt gactgctaaa cagagaaaga ttgcctggac taggcattat
                                                                      180.
ceteetagtt ggaaataaag geeetttetg ggggeaggaa gtgggatttt caggggaece
                                                                      240
tacagacgta ggcagccaag agtcaaacaa aacaagcata tgcaatagtc ataattatgc
                                                                     .300
tagtatgaca gtatgaatta ggtgactcag ccaggcacat acaggagttc ggagtgggga
                                                                      360
cagtggaage ccacaaaact ccatgtttgg gccatcagta gacacttggt ctgagaaaca
                                                                      420
cagtaaaatg tetgeeeggg tagteaegat cattetagta tgaggtagae aggaageaga
                                                                      480
gcagggccag gaaatggaag gggccaccca ggccctcagg agtccctgac aagggaaggt
                                                                      540
ccctccatgc tctctgaggg tggcggggct ccaaagatcc tgggccagga gccctttgtt
                                                                      600
ggagegggee tigteetggg eagitgeeag gegageeegt teaegieeee eiggeegige
                                                                      660
tgctttacgg gccctcagtt cctgctcagt aggacgctgg gcaaatgtcc aggagccatc
                                                                      720.
tgggcgagca gggtccccat cggccgcaag aaagcgttgt ccccgttcca cactttgaag
                                                                      780.
atagaagteg gteteaeget tggettgage aaceteeget eteaageget geetgegeae
                                                                      840
ctggcgctca aaggcgaggt gctcgctgag gtgggaccag gtgaaacggt gcaagtactt
                                                                      900
gaggttccaa agatcataac ggaaggggct gcgcctgcgg gcacccatag gcgtgttgtg
                                                                     960
tagactggcc gccacgcgct tggctatgcg cttgtcacgg aactccaccc atccctcggt
                                                                     1020
gtagteettg gtgtaggace getttittee teeggeaget getgetgeet tettettgeg
                                                                     1080
teteacgaac eggteeteag eetgaaagaa gaegegteeg acetegeeat aggegetgag
                                                                     1140
aaggttgcgg acgtgcaggg gccggaagcg cggcgggata tggcccaggt acacaatacc
                                                                     1200
tggcactacc cgtttcttgc tgccacaggc cgcttcttcg gattcctcct gctcctcctc
                                                                     1260
egeatetagt gtetgttetg tecetteeag eggetettge teegttgegg cetteteega
                                                                     1320
tteetetgee teeatgttga etgacaegag eggeetegtg eegetegtge e
                                                                     1371
```

```
<210> 4956
<211> 1496
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1459)...(524)
<223> similar to gil280135 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4956
                                                                       60
ttttttttt ttqqqtttqq tttqgttttg ttttgttttg tttattgtgg taaaatacaa
aatctaccgt cctacaagga gggtggcgtt cagtaccttc accacgccgt gcagccatcc
                                                                      120
                                                                      180
catctgattc cagaacattc tcatcaccca gaaggcagcc ctgtccccat tatgtcacct
                                                                      240
agtcacccc aggtccccct ccccagtccc ggcacccacg aatcctctcc ctggattctg
tgggattggg tctgtccggg gacattttca taggaagtgg ggatcacagc ggtacccttc
                                                                      300
tgtgtctggt gtctctcact gagcgtgaca tcctcaaggt gcatccgcac tgtggcctgg
                                                                      360
                                                                      420
gtcagagett egeaceteet tgtggetgag teteatteea gegegtgggt gegtgggtgg
                                                                      480
ccgcgccgtg ctgatcccct caccttcact gggtgttcgg tgttctccgc ctcgggctgt
cacaaatcgt gctgctgtga gccactgcgt gcaggtctca tcagcgtcgc aggcgggtcg
                                                                      540
gccacagcag gaggctacag agacacaggg cagcggccac gcccacgccg cccgtcacag
                                                                      600
                                                                      660
ccaccatege ccagtggtaa aageteaege aggeeetgea geagagetet gaggggeaag
                                                                      720
ggtgcagget etggatggee atgaetgeea geeeattgge cacettatee aagaagetea
tggagccgta cacgaacgct ccgctgttcg tgtggggacc gatgaggtcg gccgtcatgg
                                                                      780
                                                                      840
ccagcgaggt gacgaggatg gtggcacagc cagcacccag cagcacagcc gctgcgtaca
                                                                      900
eggecacace cagtecetee gecagegeca eccaggegge aaaggecagg ateaccagga
                                                                      960
ggcctgagaa gtaggtcatg ttcctcccaa tgcacttgtt gatgggcttc atgaggaagg
aggacaagaa geegetgagg tacateacea ggggaatggt egegatgaae ttettgggea
                                                                     1020
ggtggagcga gtaggtgagg tacatggcca tgtaggtctg ggacaggttc acgatgagcc
                                                                     1080
                                                                     1140
tggtggtcat gtacagtatg cccacctggt agaaagccgg ctcccggagc cagtgcttcc
                                                                     1200
agagcagcag gggctgggcc gtggcagggg ccaacagggg ggtgtgctcg cctggctcct
                                                                     1260
ccgcatgcgg ccggcgctc tcccgggtgc ccaggtggaa tagcagtgag aacacggcgc
cgacacccac caccagcagg gacaggttcc ggaacacggg cacgtcctgg ccccccagct
                                                                     1320
                                                                     1380
ggtcgctgat gctgatgtct tgggtgggct ccaccegcga cgagccctgc aggtgcagca
ggagccaggc ggcgccgtag acggtgatgt tggccaccac ggtgaacgca tacctgagtg
                                                                     1440
ccgtgagctc caccttctcc ggacgcgtgg gtcgacccgg caaaacggag cggctc
                                                                     1496
```

```
<210> 4957
<211> 729
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(559)
<223> similar to gi498721 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4957
ggaaaaacct ttagtcgtgg ctcagaactt actcaacatg agcgaattca cacaggtgag
                                                                       60
aaaccctatg aatgtaagga atgtgggaaa tcttttattc gtggttccca gcttactcaa
                                                                      120
catcagagaa tccatactgg tgagaaacct tatgaatgta aagaatgtag aatggccttt
                                                                      180
actcagagtt cacatettte ccaacateaa agaetteaca etggtgagaa accetatgtg
                                                                      240
                                                                      300
tgtaatgaat gtggaaaggc ctttgcgcgt ggcttactac ttatacaaca tcagagaatt
catactggtg agaaaccata tcaatgtaag gaatgtggga aagcetttat tegtggttca
                                                                      360
cagttgactc aacatcagcg aattcacact ggagaaaaac cctatgaatg caaggagtgt
                                                                      420
ggcaaggcct ttagtcatgg ctctcagctt actctacatc agagaatcca tactggtgag
                                                                      480
aagccctatg aatgcagaga atgtagaaag gcctttactc agagttcaca tctttctcgg
                                                                      540
catcagagaa ttcatactgc tggagctccg ttactctcat ggggactttg agaatggtat
                                                                      600
                                                                      660
ctgggtgtta tggatcatgg agcagaaata cagaaggagt ctgcaaccct gatgactttg
tggaacagcc atactagctc tggtctgctt gcctcctgtt tctctttaaa taaaattaaa
                                                                      720
catcttaaa
                                                                      729
```

```
<210> 4958
<211> 1618
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1619)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1)...(740)
<223> similar to gi2852615 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4958
cccatggcca cgggtgatgg cgccaagacc ctggccatcc acgtgaaggc cctgacggca
                                                                       60
gactocatco gcatcacgtg gaaggocacg otococgoot cototttoog gotcagttgg
                                                                      120
ctgcgcctgg gccacagccc agccgggggc tccatcacgg agaccttggt gcagggggac
                                                                      180
aagacagagt acctgctgac agccctggag cccaagccca cctacattat ctgcatggtc
                                                                      240
accatggaga ccaccaatgc ctacgtagct gatgagacac ctgtgtgtgc caaggcagag
                                                                      300
acagocgada gotatggood taccaccada otcaaccagg agcagaacgo tggoodcatg
                                                                      360
gcgagcctgc ccctggcggg catcatcggc ggggcagtgg ctctggtctt cctcttcctg
                                                                      420
gtcctggggg ccatctgctg gtacgtgcac caggctggcg agctgctgac ccgggagagg
                                                                      480
gcctacaacc ggggcagcag gaaaaaggat gactatatgg agtcagggac caagaaggat
                                                                      540
aactccatcc tggaaatccg cggccctggg ctgcagatgc tgcccatcaa cccgtaccgc
                                                                      600
gccaaagagg agtacgtggt ccacactate tteeceteca aeggcageag cetetgcaag
                                                                      660
gccacacaca ccattggcta tggcaccacg cggggctacc gggacggcgg catccccgac
                                                                      720
atagactact cotacacatg atgcccgccc acccgggctg coccgcctca gccccagctg
                                                                      780
ccctggcgtg gccatgtggc tttgcccagc ctgctgcaat ccaagagagc aaggaagaga
                                                                      840
```

```
900
aattecatgg gtgactttee teegeagaaa geaaagtttg gggagggetg aegattttgt
                                                                      960
agaacacaac agtgacaatt ttttttaaaa gaatagaagg caggaggggg aattcgacat
                                                                     1020
tgttgaagac ataatttata ccaagttatg cccagttggg gagggaagga ctaaaaataa
                                                                     1080
tattgcaqqc agggctgggt tgggtttttt ttttttcccc cctgaactgg aaggatacta
cctgtacaac atcttgtgga cacctcatgc tttgttcaag gccatcacaa aggaaccgcc
                                                                     1140
                                                                     1200
cagggagaag cagccggctc tcaaagctcc cacgcagttt tccccgccac tggccactcg
ctggcgaccc gatggaaggt tttcaggctc ctcacaaagg agagagggaa gaaaagatct
                                                                     1260
tttgccctgg agatatggtc ctgaaatctc tcccctggct tattccatac catttccctt
                                                                     1320
gcagatttgc agaaacatgg catctttcac tgcattcttt gaacaatcat gtagtcgatt
                                                                     1380
                                                                     1440
aaaaaaaaa aaacaaactt ttttttccta ggctgaagcc cttttaagtt ccatgccccc
ccctccgaaa aacccccggg ggaagccgta actttccctg ccacctggag gggcatttgt
                                                                     1500
ctgcctgtct atccctgggg gggggcctct aaatacagag gggtaaatag agccacatgc
                                                                     1560
acggtcctta ccgttttttt tggngcagtt cttaccattt cctgaacaat aaaatggg
                                                                     1618
```

```
<210> 4959
<211> 2384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (332)...(1831)
<223> similar to gi2662364 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4959
agacaacttg atagccacag ccctttgtct ttctggcagc gggtctcagt ctgatttgaa
                                                                       60
ggatgtggcc agcacagcag gagaggaggg ggacacaagc cttcgggaga gcctccatcc
                                                                      120
agtcactcgg tctcttaagg cagggtgcca tactaagcag cttgcctcca ggaattgctc
                                                                      180
tgaagagaaa tccccacaaa cctccatcct aaaggaaggt aacagggaca caagcttgga
                                                                      240
tttccgacct gtagtgtctc cagcaaatgg ggttgaagga gtccgagtgg atcaggatga
                                                                      300
tgatcaagat agctcttccc tgaagctttc tcagaacatt gctgtacaga ctgactttaa
                                                                      360
gacagctgat tcagaggtaa acacagatca agatattgaa aagaatttgg ataaaatgat
                                                                      420
gacagagaga accetgttga aagagegtta ccaggaggte ctggacaaac agaggcaagt
                                                                      480
ggagaatcag ctccaagtgc aattaaagca gcttcagcaa aggagagaag aggaaatgaa
                                                                      540
gaatcaccag gagatattaa aggctattca ggatgtgaca ataaagcggg aagaaacaaa
                                                                      600
gaagaagata gagaaagaga agaaggagtt tttgcagaag gagcaggatc tgaaagctga
                                                                      660
aattgagaag ctttgtgaga agggcagaag agaggtgtgg gaaatggaac tggatagact
                                                                      720
caagaatcag gatggcgaaa taaataggaa cattatggaa gagactgaac gggcctggaa
                                                                      780
ggcagagate ttateactag agageeggaa agagttaetg gtaetgaaac tagaagaage
                                                                      840
agaaaaagag gcagaattgc accttactta cctcaagtca actccccaa cactggagac
                                                                      900
agttegttee aaacaggagt gggagaegag actgaatgga gtteggataa tgaaaaagaa
                                                                      960
tgttcgtgac caatttaata gtcatatcca gttagtgagg aacggagcca agctgagcag
                                                                     1020
cettecteaa atecetaete ceaetttace tecaececea teagagacag actteatget
                                                                     1080
traggtgttt caarcragte cetetetgge teeteggatg ceettetera ttgggcaggt
                                                                     1140
cacaatgece atggttatge ceagtgeaga teccegetee tigtetttee caateetgaa
                                                                     1200
ccctgccett teccageeca gecageette etcaceett eetggeteee atggeagaaa
                                                                     1260
tagecetgge tigggitece tigteagece ecaeggicea cacatgecee cagecgeete
                                                                     1320
cateceaect ecceeagget tgggeggagt taaggettet getgaaacte eccggeecea
                                                                     1380
accagtagac aaactggaga agatcctgga gaagctgctg acccggttcc cacagtgcaa
                                                                     1440
```

```
taaggcccag atgaccaaca ttcttcagca gatcaagaca gcacgtacca ccatggcagg
                                                                     1500
                                                                     1560
cctgaccatg gaggaactta tccagttggt tgctgcacga ctggcagaac atgagcgggt
ggcagcaagt actcagccac ttggtcgcat ccgggccttg ttccctgctc cactggccca
                                                                     1620
aatcagtacc ccaatgttct tgccttctgc ccaagtttca tatcctggaa ggtcttcaca
                                                                     1680
tgctccagcc acctgtaagc tatgtctaat gtgccagaaa ctcgtccagc ccagtgagct
                                                                     1740
gcatccaatg gcgtgtaccc atgtattgca caaggagtgt atcaaattct gggcccagac
                                                                     1800
caacacaaat gacacttgtc ccttttgtcc aactcttaaa tgacggacct gactggggag
                                                                     1860
gaagaagaag agaaactgat gtgaacagga agcgcgggtt caagatttct aaaactctat
                                                                     1920
atttatacag tgacatatac tcatgccatg tacattttta ttatataggt aatgtgtgta
                                                                     1980
tagaaagtct gtattccaat gttcgtaaat gaaactatgt atattatgca gaaacagtct
                                                                     2040
gttccccctc atcttgcaat tcctttgggg gatgcagatt gtagggaaga tgatgtttag
                                                                     2100
tttggccttg aaattatgat atccctgccc agggctgttt tcaaatacaa tataaaaacc
                                                                     2160
acctaggaac etgetgttge tetaaggeca ttetgetttg gtttggetea geetetagte
                                                                     2220
cattteetta aggeteatgt atgeagattt aaageetggt geteaceeae tgteeaacea
                                                                     2280
gatgeettge ttacegaaag cetecagaag ceteagtatt gttttageea etetaeteca
                                                                     2340
aatggataaa atgagactct gattgagaaa aaaaaagtaa aaaa
                                                                     2384
```

```
<210> 4960
<211> 1695
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1696)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1312)...(667)
<223> similar to gi3875410 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4960
ttttttttt ttgcaacctt gaatttattt tttattgaaa cacagtacag aaaacaccaa
                                                                       60
acgtcactcg acagcagtga gctcatagct gtaatggagt tggccccaga tgccaaacca
                                                                      120
cetetgetga ggtgtgaett eetetggagg gtgacatggt caaggaaagg gaaggtgtte
                                                                      180
tetgteaaat teagagacea tgtgeacete caacaaaate acaeteeeta caagttecag
                                                                      240
tgtgccccca gtgggcaccc cgtgggcaca tctttgacaa tggggaaggg gttaacggga
                                                                      300
agtaggtggg gggacatcca accccaatgg ggcacatacc caggaatggg aatgtaggct
                                                                      360
getgagtett ettggagaag aagagagage tatgeecaca gtteagettg tggggeecet
                                                                      420
gagacaaggg cccacagtgt gcggagagga ttccaaagga ggaggaggat ggtgacatgg
                                                                      480
acagtgactc tggggctgcg ggccacgatg tggcaaaaat ggagcagctg ggtggaggca
                                                                      540
agatgagggg ctgaggagtg gaaagacacc agaatggggc agggagagca attccactca
                                                                      600
gagtggagca gggaacagcc agcatattag ggccaagacc cggtcagcca gcttcaaccc
                                                                      660
cttcacacgc aggatgagct catggaggtt gatctgccat aagttgaagg cctcgctgaa
                                                                      720
agagatetgg gteettetga agaatgaaca ggtattette ttettgtget cagetagege
                                                                      780
tetgatgeag caacgtgaca tgttgagaaa ggagetggeg etggegeggg tgeecaggge
                                                                      840
ggcctcaatg ccacgcagca ggtcgttggt cttcaagatg agcagcatct ggcgcggcac
                                                                      900
gtggttgagg agatggctga tctgggggag gtagttggcc gcgttgttgc gaatctctaa
                                                                      960
```

```
gtcctcagtg gcagtgacgg gagcttggct gatgcctctg ttgaccgagt cccacgatcg
                                                                     1020
egeegteage atgeaggeaa acaaggggta gagateeeeg geteeeagte getggetgta
                                                                     1080
ctccttcact ctcttcatgt cagtccagat cagagactgc cagaggtggc agtaattcag
                                                                     1140
geggaattet teegtgagea tetggtaaag cecatggtee aacaggacaa teteegeett
                                                                     1200
tecegtgeeg gggtgettee geaccagtae attgeegggg tggggatege agtgeacgaa
                                                                     1260
gccattgacg aagatcatct cactatacat cttgcccagg tggcgtgaga tctgaaagag
                                                                     1320
aagaggggca ggtgggagct cctctccact cacatctatc cgagggacct ctgtctggtc
                                                                     1380
teteaatgtg gteaetttta aggggaggee agagaaaate ggtgggeegg ageggttgtg
                                                                     1440
gtgggagtga ttgtttgaga tgacatactc tttgagttta agatttctta actttagctg
                                                                     1500
caccttagaa teatgaaacc.atgtgggcgg tacaaggcac cagtattttt taaagttcga
                                                                     1560
ggtgacgtga acatgggatt aggtaggaga actgcactct ccacctccca cacccgcccc
                                                                     1620
cegacttgtc ccccatttct ctcccctcgt gccaagcttg gcgtagttat ctaatagcgt
                                                                     1680
tttcaatnng ccccc
                                                                     1695
```

```
<210> 4961
<211> 958
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (961)...(156)
<223> similar to gi4680229 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4961
ttegtgeege aatacattta ttattttate acatatttae attecagtag geageetgte
                                                                       60
cccctgtcca acaaggccct tiggtcctca ctggtcggcc tgctccagac ccccaggtgc
                                                                      120
aggegegtét ceggagtéga ggéteegega teteagaegt teagéaggag ggeeggtége
                                                                      180
teetegtetg cagegteget gggaggaatt teataaatga caaacaggga ggagtacagg
                                                                      240
cagcccagga aggacacgag gctggagaag tacatcaccc cgttggcact gcccacggcc
                                                                      300
gaggicaggg gccccaggac cagggagacc agaatcigag ccaggaagta ciggcagcic
                                                                      360
agcagagaga tgtccacgcc catgccccgc cgggtgccgt ccgcactgga ccctgcaaac
                                                                      420
ttettaetet gatagtaate geagageage gagtaaggea aggtgeacag ggtggaaaat
                                                                      480
aaaatcccgt aggttatgca gagcgacagg accacgtaga ggttcctgga gagggtggca
                                                                      540
agceeggtee eeaggeegaa ggegagatag gegatgaagt agagggtgeg gaegetgagg
                                                                      600
aacteeteea getteteeag gatagetgag tagaaggeag caetgaagge gtagatacae
                                                                      660
atgececage ageceatggt caegeegetg ttgtacttet gatacgeete tgatgtgtge
                                                                      720
ggggccttgg ggtccccctg aaacaccacc tcgcccatga agtctgtgta gaagagcaac
                                                                      780
ateceetega atgagageea ecceaggaag tggttgaege agagggtgeg tagegeettg
                                                                      840
ggcatgttgc agatggtgga gcagaggcgc cccacggaca gaggctgctc cgcgcgctcg
                                                                      900
ctggageceg teageteget eteataette acgeegttga geaggatatt ggeeacce
                                                                      958
```

```
<210> 4962
<211> 1004
<212> DNA
```

# <213> Homo sapiens

<220>

<221> misc\_feature

<222> (76)...(684)

<223> similar to gi4884435 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

## <400> 4962 aaatgettae gecaagettg geacgagget ceetecaget tagettteae eeggtggtgt 60 tecegggagg agagggegga gggeggaggg aacttgeace gaagcateae tegagaceee 120 aaacctccag gcctgaggcc cagccagcgc ccaatggatg acaaaaagaa gaaacggagt 180 cccaageest gestggessa gesagessag gesesaggsa castacggag ggtesetgtg 240 cctaccagec acageggete ettggeecta ggaetteete atetgeeate ecccaageag 300 cgggccaagt tcaagagagt aggcaaagag aagtgccgcc cagtcctggc tggaggtgga 360 ageggetetg caggeacgee cetgeageac teetteetga eegaggtgae tgatgtetat 420 gagatggagg ggggactect gaacetgete aatgatttee actetggeeg getgeaggee 480 ttegggaagg aatgeteett tgageagetg gageaegtte gggagatgea ggagaageta 540 gcccggctgc acttcagcct ggatgtgtgt ggggaggagg aggacgatga agaggaagag 600 gatggggtca ctgaggggct gccagaggag cagaagaaga caatggctga ccgtaacctg 660 gaccagctgc ttagcaatct gggttcatgt ctgggtgctt, tggttcctgg gggcatgagg 720 ggtggagaag gtacatactc ccaaagccat tcctgggccc tgggtgaaaa ggtgggagtg 780 catggateca agagetetgg geceeteaac etececagaa gatageeeee agageattgg 840 ggatttggcc tggttcccct cctaacagaa gcctcccttt ttctctttgt tggcagctgg 900 aagacctcag taattctatg tatcctttcc aaggaacccg tctatgtgtg tgtgttcctg 960 agaggtcagt ttcctcccac gcgtccgcgg acgcgtgggt cgac 1004

<210> 4963

<211> 1490

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (3)...(1493)

<223> similar to gi3702137 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

# <400> 4963 aagtctggga agttgacgag cagatagatc actacaagga aagccaagac aaatttctgt 60 ggcaagctgc attcataggc aaggaaacac tgaaggatga aagtggtcaa gaatgtaaaa 120 tatgtagaaa aatcatttat ctcaacacag actttgtttc tgtaaaacaa agactcccta 180 gctatgtaag aaagaaagga tgttcaaaac atcatttaaa ctttcttggt caaaatagaa 240 gctatgtaag aaagaaagat gatggatgta aggcatattg gaaagtatgc ctccattata 300 atcttcataa agctcaacct gcagagagat tttttgaccc taatcaacga gggaaagccc 360 tccaccaaaa gcaagccctt agaaaaagtc agagaagtca aactggggag aaactctaca 420

aatgtactga atgtggaaaa gtgtttatcc agaaagcaaa cttagttgta catcaaagaa

480

```
ctcacaccgg agagaaacct tatgaatgct gcgaatgtgc aaaagccttc agccagaagt
                                                                      540
caaccetcat agcacaccag agaactcaca caggggagaa gccctatgaa tgcagtgaat
                                                                      600
gtggaaaaac ctttatccag aagtcaactc tgattaaaca tcaacgaact catacaggag
                                                                      660
agaaaccatt tgtatgtgac aaatgtccaa aagcctttaa gagttcatat catcttatta
                                                                      720
gacatgaaaa aacacacatt agacaagcat tttataaagg tattaaatgt actacgtcca
                                                                      780
gccttatata tcaaagaatt cacacaagtg agaaacctca gtgcagtgaa catgggaaag
                                                                      840
cctctgatga gaagcccagt cccactaaac attggagaac tcatacaaaa gagaacattt
                                                                      900
atgagtgtag taaatgtggg aaaagcttca gaggaaagtc acacctctct gttcatcaga
                                                                      960
gaattcatac aggagagaaa ccctatgaat gtagtatatg tgggaagact ttcagtggaa
                                                                     1020
agtcacacct ctctgtccat catagaactc atacaggaga gaaaccttat gaatgcagaa
                                                                     1080
gatgtgggaa agcctttggg gagaagtcaa cccttattgt acatcagaga atgcatacag
                                                                     1140
gagagaaacc ctataaatgc aacgaatgtg ggaaagcctt tagtgagaag tcaccactga
                                                                     1200
ttaaacatca gagaattcat acaggagaga gaccctatga atgcactgac tgtaaaaaaag
                                                                     1260
ccttcagtag gaagtcaact ctcatcaaac atcagagaat tcatacagga gaaaaacctt
                                                                     1320
acaaatgtag tgaatgtggg aaggcettea gtgtgaaate aacteteatt gtgcateaca
                                                                     1380
gaactcatac aggagagaaa ccttatgaat gcagagactg tgggaaagca ttcagtggga
                                                                     1440
agtcaactct cattaaacat cagagaagtc acacaggaga taaaaaccta
                                                                     1490
```

```
<210> 4964
<211> 956
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(927)
<223> similar to gi289412 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4964
aacgccgccc atggctacaa ctggggcctc tggtgcatgt acatcatccc cccgcaggac
                                                                       60
tggctggacc gcggcgacga gtcagcaccc atcaggaccc cagccatgat cggctgctcc
                                                                      120
ttegtagtgg acegegagta etteggagae attgggetge tggaeceegg catggaggtg
                                                                      180
tatggcggcg agaacgtaaa actgggcatg agggtgtggc agtgtggcgg cagcatggag
                                                                      240
gtgctgccct gctcccgcgt ggcccacatc gagcgcacca ggaagcccta caacaacgac
                                                                      300
attgactact atgccaageg caacgccctg cgcgccgccg aggtgtggat ggatgacttc
                                                                      360
aagtcccacg tgtacatggc ctggaacatc cccatgtcga acccaggggt ggacttcggg
                                                                      420
gacgtgtctg agaggctggc cctgcgtcag aggctgaagt gtcgcagctt caagtggtac
                                                                      480
ctggagaacg tgtacccgga gatgagggtc tacaacaaca ccctcacgta cggagaggtg
                                                                      540
agaaacagca aagccagtgc ctactgtctg gaccagggag cggaggacgg cgaccgggcg
                                                                      600
atcetetace cetgecacgg gatgteetee cagetggtge ggtacagege tgacggeetg
                                                                      660
ctgcagctgg ggcctctggg ctccacagcc ttcttgcctg actccaagtg tctggtggat
                                                                      720
gacggcacgg gccgcatgcc caccctgaag aagtgtgagg atgtggcgcg gccaacacag
                                                                     .780
cggctgtggg acttcaccca gagtggcccc attgtgagcc gggccacggg ccgctgcctg
                                                                      840
gaggtggaga tgtccaaaga tgccaacttt gggctccggc tggtggtaca gaggtgctcg
                                                                      900
gggcagaagt ggatgatcag aaactggatc aaacacgcac ggcactgacc ccacct
                                                                      956
```

```
<210> 4965
<211> 855
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (858) ... (342)
<223> similar to gi5360129 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 4965 gggccttctc ctcagtatag cactccatgg tgctgaggtt ctgcagcaca cggtcgcgct 60 ccagctgtgt gtctcggatc ttgttctgca gcagaatcag cttttcctca tactggtgct 120 tgagcgtctg caaccgccgc tggctgttct ccagctcgtc gatcagcttc tgcttgattt 180 egateteaca agteaggteg gecaggteeg cetggaagtt caceteette teeteggggt 240 etgagtetga gtecaccagg etetetteac tgeeegagte eteatettea teetegegee 300 ettectecte etcacageca etctegtete getettecte etcetectee geetegttet 360 catccgtctc ctcgctgttc tcctgttgga gttttgccct ctttttgaag gcttccttct 420 eggggetett ceteegetge etgacetect tettetttag eegeteeagg teetgettgg 480 ccctgcggat cacctccgag gcatcctcca tggagctggc agggctgccc ccgaaggccg 540 gggcggctgg agaagcaccc agggagtagg ggctcctagc cgaggcccgt gagaggctgc 600 ggcgcaggga ctcgttcatg gcttcactct ctagaagctt agtccgtagc tcctcgatct 660 cccggatgta gttctggatc agcgcaccaa tggcctcatt gccatcgccg gccttggcta 720 gcagcaggtt ggcctcctgg ctcatgagct gggtgacgcg gttgttgatg gcatcgatgg 780 cetectgeat ggettteace egeageegea gggeeceatt eteettetgt ageatggeat 840 tctctcggaa cagat 855

```
<210> 4966
<211> 1666
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1667)
\langle 223 \rangle n = a,t,c or g
·<22<sup>0</sup>>
<221> misc feature
<222> (1666)...(786)
<223> similar to gi806570 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 4966 geggeegeag cacetgattt ecceeteagt ggaattteea acacaetgee etgagtgeee

```
cagttaggcc tggcaccctt ggctggtggg aggggcaggc cctctgcctg tctgcttaca
                                                                      120
                                                                      180
gaagcccagg gccagagggt ggtggaagcc gggtagacgg acatgtcttg cccaaagcgc
atnatgacca gagagccagg cctgcataca gtagttggag gcatggggca gaaagcactc
                                                                      240
                                                                      300
ccctccctcg agcactcacc tcacctccag gggcaaaccc cagcaagaga cgcacccagt
                                                                      360
ggttttccag cccacaggag gccctgccct cattggcccc ctctctcctt tctgatttgg
                                                                      420
gcccaactgt cgccgtggag cctgggccaa aggcactttt ggaaacacgg atgccagtgg
aggecacage ageteeggge eccatgggge tactgecact etetetggaa aacaggeegg
                                                                      480
agccccggaa ggagccccct gaaggccact actggcaggg cagtgcccag tggcatctct
                                                                      540
                                                                      600
cttetettet gtteetetgg ttggtgeage tgeeaatetg atgeeagaea gaeaeecaaa
                                                                      660
ggtgtggaag ggtattgcat ctcttggcaa gttcacagtc tgtccggttc ctgccattcc
ctcctcctcc tgagagcagc acgttgcata tgaaaaacgt cccatccagg atgcaatgta
                                                                      720
                                                                      780
aacaatgcag aaggaaggtc cagccgcggg gctgagcagg gatgtccagg taggctcctg
                                                                      840
ccttatacct ccgtggcaat gacacattca ttcctctcct ctgatatcaa acacacagac
tggtacatgg agtccctggg ggagcatatc gctgatatcc gacactctgg cttttcactg
                                                                      900
tgtaaccgca gtggcgcctt ctctcctaag ctcttgtcac tgtggggaaa ctttcctggc
                                                                      960
atggtccccc gccccagggg ccctggggcc agattatagt ccaatgtgtg gttttgctgt
                                                                     1020
ttgccacagt tggacttgtc caggccacag tccacttcca gctccttctt ctggtttgtg
                                                                     1080
tttttaaget gggeggeagg aateaggttg teettetgga agteegacaa gttgtteatg
                                                                     1140
getteeetge tgeegtegte eggeegtega ageegeaget geegeaeage eactgeeace
                                                                     1200
atgcccagca gtaccagcag cactgccagc cccacaccca gcgagacggc cacccagggg
                                                                     1260
aagctgggcg gcaagcccac ggggaactcg cagcggctgc ccacaaagcc ataagggcag
                                                                     1320
ttgcacacaa aggtgtctgt ggagaggtcg gtgtagcagg tggccctgtt gaagcaggga
                                                                     1380
ctegaggeac aggeategat ggatgteege aceteacage gteggeeaga gaageeggea
                                                                     1440
gggcaggtgc acatgagccc attctccagg tcatggcaag tgccaccgtg ggcgcaaggg
                                                                     1500
ttacgggcac agtcgctgac gtggagttca cagtaggtgc ccgtgaatcc aggacggcag
                                                                     1560
eggeacatge ggettggace teggtteagg caetgteece egttggeaca ggggttgetg
                                                                     1620
gtgcacctgt ccactttctt ctcgcagttg gagccggtga agttgg
                                                                     1666
```

```
<210> 4967
<211> 6506
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6509)...(246)
<223> similar to gi2224591 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4967
ttttttttt ttcatgctta gtgttttatt tcctcaaagg agccacgcca ttggccttcc
                                                                       60
caaatacete etggtateet tecaatttee accaeteeca accgteagat tecatteage
                                                                      120
ttcctccaac ctcagaccaa ccactttctt ttcacaagct cagaccttcc aaatatttta
                                                                      180
aaaatgaata aatgttaaat accaactttc actattacag aaaggggcag ctagaaaagt
                                                                      240
ttactetgtg cacaagactg cgacaccccg ctcgtagaag ctgcgaggat cctcctttgt
                                                                      300
agcaatttcg aagtccacgg tgaagatgag gtctgcacgg gtgaagttca ggtagacagg
                                                                      360
taaggttacc acactggcct tetteteggt gtttgtetge ttgacccage geagetgegt
                                                                      420
caggggaagg gcggttgaga tggcattgga cagtgacagc ttgttgttgt tgcacgtggc
                                                                      480
cccttgaagt ttcaaacccg tgactccgaa gctgcaagcg tcaagggtgg cgccctgtga
                                                                      540
ggtggtgacg ttgacttcca ggcagagctc ctccagggac cagctgttgg cctgggccac
                                                                      600
```

```
660
atactgcctg gtggcagtga tgtacgcctc aggcacgaac aggccaccca ggcacacgtg
                                                                      720
gatgttcttt agctccttgg cgccaccaga tgcagctgcc agtgagatgt tctgcagctg
                                                                      780
tttgatecte tegetgaagt eggacaceca etggatgaeg gteatgeegg eaggeacegt
                                                                      840
gtagtgggac cagctccgag gcaagatccc tttcactagc tcgttgatca gcgtgcgcaa
                                                                      900
gtaqttggtc tqcttcttct ttccttcgca cacctggacg acatctgcaa ggtcctggcg
aacqtcctga agcagctttg cgcccatctt cacttctctc tcaaagaacc tgaacaaagg
                                                                      960
atccttgata ttctccacgg tgcgcttgag gtggctcagc gtctggggga tgaggtgcag
                                                                     1020
ccagttggac geggtggtgt geagtgteeg catecaggea gggegeeegt eggaegtgga
                                                                     1080
gtotgtocto gtottottot cagtototgo gtaggocagg togtoctoat cotocaacat
                                                                     1140
etgeatette ageattttae tgateatgte caeaccetgt gtggtaagga ggaetetete
                                                                     1200
                                                                     1260
ggcgttgttg ggcaggccca gccaggaggg cgtctgggtg tcggggagca actccaccca
ctgcacaaac tectetegee tgatgccate tggcatttga atgtetttat gteegtegae
                                                                     1320
                                                                     1380
cttgcatgcc agcttaaact cactgtcgaa actcctggtt gtgaacaggc gctccaggaa
ggtgttgagc agacgctggt caaactcgtt gtccacgcgc ccgccataaa tggactgggc
                                                                     1440
cattaaggtc tttagtgcag accacgggat cttatccggt gagatgttct gcctgccctt
                                                                     1500
ggccgtgtca tccagccacg tgtccaccgt atcgcaaget gaccgcaggt cagactetec
                                                                     1560
                                                                     1620
aaattcatac ttctttgacc accccagtgg tgcgtatcgt aagcgttctt ggatgatcgc
atgaaaccag gccagcagga agtacaagcg ggcacgctcg ttgggagact tgcatatccg
                                                                     1680
tgagacggga atgctgctga acgtcctcag catgttggcc ttcacccctg gcggtggctc
                                                                     1740
                                                                     1800
gaacacaaag atgeggeeeg caeggageag atteacagge acettggggt tgateteeat
ggtgaggaag agtcggaagc aggcatgcgg ctgcagggaa tgcaacttct tctccagctg
                                                                     1860
catcagccac cetggggcca gatgcacatt etteageate acceaectge eegaetttae
                                                                     1920
ageggtgttt attgeettat etgettggtt aaageettet geagageega ttgeaattga
                                                                     1980
                                                                     2040
agtgatetge gtgttetget eggetgeaag gteetegaea tgteeactgg cateataace
                                                                     2100
aggeacagag cacattaaga caggagtgtt gggetteace tetgtgeeca caatttgggt
caggicgage ggetgeteca tgatggaeat gaaagaetee ecaaggittig tigaaacaaa
                                                                     2160
                                                                     2220
catgtgggcc atggccaaca ggcgatcggg ccggaaagcc tggatcagga gcaggcggtg
gatggcctgg ccaatgggtg ttgcaggtgt ttcttcactc cagaggtagg gcacagtctg
                                                                     2280
ctccggggag ctgctgtcca gccagatgcc aaattgctcg tctgcctgaa cctttgcaat
                                                                     2340
                                                                     2400
caagteetta aacgegggaa ggeageteag ceteaceace geeteegeet geteeacagt
caggeeetgg ateetggggg tggageeage acteaggaea ateteattte eteteaagaa
                                                                     2460
gtgctggaat tetgcategt aggtgggete eeccaeggtg eeetteagtt tgattettge
                                                                     2520
cagcagcatg gcaaaggtaa tgtggtcctg atgcagcatg cctcgagcca ctcggttaaa
                                                                     2580
cgccacctgg aagaggtcct ttgttataat ggacaggcgc tgtgtgtggt cggtgacacc
                                                                     2640
cttcaggttc gggttctcgt ataggacgtt gtgataaatg tccaggaaaa actggaggga
                                                                     2700
gtactggtac aagaagtgta tctgcttgag ggactccatg gtgaagtaga tgctgctgca
                                                                     2760
ggcggtggag agcgggaggt actgctggga cacggtctcc acctcctgca tgacaatgtc
                                                                     2820
egteteetea aettteetgg tgacetetge ageetetete tteaggttet eeagagtggt
                                                                     2880
tatgategtg tegteateea aaatgegeee ttteaceteg tteagagett gtagtagaga
                                                                     2940
tttttccage tgacgcaaac ggagetgaaa ttccccttga agtttaagaa gatcagatcg
                                                                     3000
tttctcgtcc acatcaggtc tttctgcttt aagtacttca tttagacact ggctttgtaa
                                                                     3060
actgctacgg gtaactgtga agtttacaaa agtaacccgg gaacagagat ctggtgggaa
                                                                     3120
ctcgacagtt ggatcccggg tggacaggaa gatgacaaac gatggcgaca ggtctatgtc
                                                                     3180
ctggtccccg agagtgatca gcactctccc ccctgttcgc cgcacttcac ggttcagcac
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cgggttcaaa actggatcgt agctttccac atcctggacc agaagggggt taccgaatct
                                                                     3300
cagtgcactc totaagttot ttotgaaggo gtoatcoagg aagctggtoo gtgtgatott
                                                                     3360
acgatectta tatteattea taatgaatte tgtggeetgt eeagaggggt caatgateag
                                                                     3420
eggataceta ttgaategtt teageatgat ggeattttet gtgeaaaggt cateageagg
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caaggagetg geetgeeage gaagaegete ateageattg gaaaggtatt cegteetgge
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aatatetgta eggaaetgga tgttggettg etgtaggtga tgggaeeagg tagtgaaeaa
                                                                     3600
gttctgacgc atctgctggt caaagtaacc cgcgtaggca atgaacgcag ctgacaagag
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acagtoccca gcaatggtgg acatotggtt tttgaaagtt tcacttgttt tttcccatog
                                                                     3720
ttcacgttca gcagacaagc tettcagaag agcagtgete eggtttaett ttgeetegae
                                                                     3780
agetgecagg tetgeettga tggeetggge etetgagate aggaeggegt 'attecteett
                                                                     3840
gtagegggeg atgetggett ceaggteteg gateatetge tecacetegt tggeettetg
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ctggttgtcc ttggcgtcat cttccagctt ctgcagctca ttgcgtaggg gctccactct
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ctttaacatg tctgcatagt taagctgtgc aattgcccat ttcaccatag ggccgcaagc
                                                                     4020
```

```
cagggaagec cgattcacaa tttcataatt gtaacttgga ttggacatgt aatttttctt
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catcttctcc cttatggcgt cactgatctc ctctgcagag aagttgacga tggtggggat
                                                                     4140
                                                                     4200
gaagttetee egeatgatga tggageggat etgetteeag tetgtggtge ttteeeceag
cagcaggcag atggactcca gcgccagctt cacagcagca ggagggttgg ccatggacct
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cacctccacc aggtgctgct tcttgatcga cttcacagca ttctgggcct caatgacggc
aggttccacc ttatcaagat cttctttgac actcatctgt ttgtctgcaa ttacctcctg
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etgettatge agetgtteet ggatttettg geteataace ttettettt cageeteetg
                                                                     4440
etggtettte accatetttt teagettgte attggetget geattettea eetecagete
                                                                     4500
ttggctcttt atcctcaagt cacgacgcag ttcttctacc tggtcgactg tctctttgat
                                                                     4560
ettectgage eccaegitea agitgeatetg etgeteetee agetegetee gettetegtg
                                                                     4620
gaacaggttg gcatagtgat tgatgaagtc caggtagtgg cgaggggtga tggccatcgt
                                                                     4680
tetgeegeet egetttgeta geegageatt egeetggtga agagtetgat gaacaaacae
                                                                     4740
acagetgtte acaatggett ecegatggga tggtggetge ggeagettat catacacaae
                                                                     4800
tggcatgtaa tcaggcacga tgtaatttgg cttctccaga tccatcttac ttgtgaattc
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tttgccaacc tgatacagtg cttcggtgga ccagtctcca aaccaattca acacacct
                                                                     4920
gttgaaaagt getggtgatg tagetgeeeg gteettgagt eeeteegagg aegggtteat
                                                                     4980
ggtgaacacg acgtggaggt tgcggataac ctggctagtg aaccacttgt agagctcctc
                                                                     5040
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ggcatactcg tetectteaa agagaceagg caceteteca ttggccagaa gggtatteat
                                                                     5160
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attituacag ccagaacgic tcaacactgi ccgtagatci tcatcaaagi cticccctgi
                                                                     5280
gtacttecta tggaeettaa tetggtacae acteaaaceg tteatecagg cgaegaaacg
                                                                     5340
agacagggta gtttttcctg ctccactaac accaatcaga agcaagtggc cttgaggttg
                                                                     5400
acggaatatt ctgtcaatcc tcagcacgtg gtctaggact tcattaaaca gcaccagcgg
                                                                     5460
aacatcaagt tottottoat aaaagacott cagootagot ttgacataat otottaacto
                                                                     5520
ttcttggtct actgggatgt aatcetttga cagecagttg ctgtacaaga tgggtcggct
                                                                     5580
cattgeette tetetgtega tgttagggaa gtgetteaga geaacegtgt egatgttete
                                                                     5640
atcagtecaa egecteteet catectetae gagtetatet tggaagagae geagagette
                                                                     5700
atgtgcccaa atccgaatga ggccttcaac aggcagggtc tccagaggtc tcagcgcttc
                                                                     5760
aaagatgcct ctcacccacc tagtcatttc acggggtgaa tagatatagt gaggttgtgt
                                                                     5820
atcctgggtg aatctctcct gagacatggt gtagaactcc accatggcag cagtgagcgg
                                                                     5880
ctctgcatac gtccgcaggg atggaatgag cctcagcatg gcgcggttga aggtgccgta
                                                                     5940
gatctgtgtg agggaggcgg ggcccgggta atccacatac acgacaggca cgtggcgcag
                                                                     6000
gaacctgtgt gagaggggct ttcttccagg gtctgtgggg ggattacaag ccccaacaaa,
                                                                     6060
etggattete tecagettea eccatgtttg atetgaggta eggtaaaage eteegtgete
                                                                     6120
caccatctgt ctgatgaagg atatgaccct ctgggtccca tatttatcca tatctggcaa
                                                                     6180
gttgatttca tcacagaaca acaccagcca ctttccaagt tgaacaggag ccaaaaccac
                                                                     6240
cccattaggt gtgcgcctgt actcgcagta gtgatcaaaa gtcttcagaa gcagctctgg
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agtagtagca ctggagaagt tgagacccac cacctccatg tcaggcaagg cccggagggc
                                                                     6360
getgaagagt gteatggtet tgeeagaeee aggagggeea caeaagaeea ggggettgtg
                                                                     6420
tteggeeage caagtgtaca agagggette gtggeggaet gtgteeageg ttggeacgae
                                                                     6480
gacatcaggg gctgccacct tgtgcg
                                                                     6506
```

```
<210> 4968
<211> 7061
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (7062)...(1105)
<223> similar to gi3327054 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

60 ttttttttt ttgtccgtaa ggcttttatt ataaagaaga ttccagagtc ccagctgccc ccctccagcc cccatgggct ctgagccagt cccaacactg gctgagttgg ctgcgagggg 120 ecegeatgge ceateggeea cagagggteg tttetggeag gaacggagtg ggtggtagte 180 teaggegeea ggggegetet gecaggtetg eccgetetet ggaacagtea tttecagtgt 240 .300 tgcatgggga gcctctcggg acccctcccc gggtcctttg cgcaagcggc agctattcac agttggtgca tgatacgttt tttaatatat aaaagcttta aaaaaaaaag tggtgctatc 360 420 tttagaaaca ctttcagcaa gatcaagtag cccagctaca gcctcggtgc atcttaaccc ctctcctttt cctggagacg gggctcccag ctcctgtgcc ccccatccct ccctccacc 480 ctccctgctc ctggagaagc ccacagagca ccccatggcg cgggcactgc ccactctacc 540 aacageegee caageaacaa aaatetgaca etaettgaaa etgtetgtgg eeaggateet 600 ctacgggtga gggggaagtg gagataacat tttggtagtt gaagcagaaa ccaatcaaag 660 gtcagttcaa ggagggctcc ctgcaccagt gtggatgagg tagagtttct gqqctqcaqc 720 etecgggetg geggeeteet etececeagt ttgtgettgg eegeetggat geaegggget 780 cttggcagca ggaccaactg gacgttgtgg agcaagtggg tgggcacagt gcaggccgtg 840 ctgggcagat gggggagcct gaccagctct ctggcctcca tcccagagac tgatctgggg 900 acaggtggga ggggatggag gtgcccaggg gtcaaggcgg gggcgcccct gtctcagaga 960 geagecete etectgeece egececagee gtetetgete agtatttece agtetgagte 1020 acaggcacgg ggtagaagat caagttgagg cccagtgggc gtccatttct cccagcagca 1080 gcctgaccaa ctctccatgt gtctcaggcc tcactgtagc actcgtagat gttgtcctcc 1140 atcaaagcca ccacctgctc aaacttgtgc tgcagttgtg tcctccgggc cgtggggttg 1200 geotecageg eggeeatgat etgeggeega tacetettgg egtaettata aatetetgee 1260 atggccacat tggtgttgaa ctcattctgg tatttcctcg actcctcggc cagatgggca 1320 tteatetett getegetgag eggegteatg teetggatet gettgtagta gegetgeaeg 1380 atcttccggt actcaggaat ctccttggcg tagaggagct tgttggttgg cgaatccttg 1440 cccagctgca ggtcagagat ggagcaggcg tcgatgaagg cctgcgcgat gactgaaagg 1500 caggogtega tgtggtetgt ettgtegatg teaaagacaa aetgggggtt etteaggatg 1560 ttcacccaga accggagagg aaggctgttg gtcttccaga tgtgtagggt gtcggggtcg 1620 gagatteece tetteteage etgeteetee aggaagtega aaaagtaett gacageeagt 1680 gggggcttgt cttcacggat actcagaatg gccttgaaca ggtcatccag aaacttctgc 1740 aacgtgccct tggtggagag caggcgggtc aggtagattt ccgggagcac cttcttgcga 1800 tggctctgcc ggtgagactt cttgggctcc gccagctcgt ccgtaggcag caccaaatgg 1860 aaatacttot otgtgtocaa gtotttoact oggoccagtg tgttgtoott ottgtotatg 1920 1980 agactcatgg ccagggaggc accttcaggg atcttgtaat gggccagcgt gttaagcttc ttgcggccgt cttccaccac tgaggtgtcg tccaggtccc gaaggatgta gctctgtgtg 2040 ctggaggcga accactcaag gtcgacgtcc tctgcacgcg gccactggga gtagggcaca 2100 ttettgeaga aggeeteeag gatettetee ttgacetgtg teagegtgte ggtgteeatg 2160 gcccgcacgc tcagcgagtc catgccacag ccctggaagg acacgttcag gttccggggc 2220 ttggcetega tgtteteeeg cageageeae teeteattga gtgtgtageg ggeettgeet 2280 gtgatggcgt cgatggagcc cttgttgatt tgctgcttga tggcacacag cagcaggaag 2340 aatggctccc ccaccgtctc ccgcagacag ctgtacatgc agatggacat ccagttggtg 2400 agcatettet ecaceaeaga etetgtgege: egeageatga gettggggtt ettggeggee 2460 gaggcatcaa tgaggtccac cagcagctcc ttcatgatgc tggtgtagta ctccagcttg 2520 ccgtgcagcg cgatggtcag cagcgaggcc aggctgcacc tgtcgcgcac cgcaaagtcc 2580 ttctgctgct ccagcgcgtg gacaaagacg atgaggaagt gcttgttgtc gagtagtgag 2640 gagaacaagc taattccctc ttccatgttg ggccggcagc tctcaggaat cttccactct 2700 cccagcagtg ggtgggtttc ctgtgcctgg gagctgccct gggagttgag ggtctgggag 2760 ggcagcacgt aacgctcttc ataaagggag gaacacttgg ggaagaaggt gcgggtcacg 2820 aagtgettat aetecaggaa ggggatgeed tggetgeggt teageteett ggtgagatet 2880 gtcatgtctg tctgcagctc agcgaagcct ttgcggattt cctctcggat ctgagattcc 2940 atetecteca tetgeageag egtettetge cagtaaeget cagcaegteg getettggta 3000 cagaagacga acagggccac cacggagagc agcagcagga cgctgcagat gacgatggac 3060 acgatgatgg ccgtctcgct gccccccagc tgcagtgtgg cgatggtctg gttgaagttc 3120

<400> 4968

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                                                                     3240
                                                                     3300
eggtactegt gactetggag ecceaggetg teetgeteet tgtggataac gagggtgaga
                                                                     3360
ggeteecegg ggtggtgett gateeaette teectettgg eegtagagaa etgtgggttg
                                                                     3420
gggaggtagt ccaggeggaa cctgctgccc egctgtgcct ccteggggtc cagtagetce
teagecacag ceacetegte tgegtaggee egeceattga tgaagaagte caetggeget
                                                                     3480
gatgcgttgc tcagggcccc gggggacggg caggtgatga gggtggagtt gagaaccttg
                                                                     3540
cagagogtgg gctcccggcc aatgtggtgg acggccatgg acacattctg caccatgtgg
                                                                     3600
aaacgeteae eageeactgt gatggteetg eegeeactga eagggetgeg geggggaetg
                                                                     3660
atggccgtga tgaccgggtt ctgcatgtac cagaaggtga ggttgccgtg cacgcagccc
                                                                     3720
cgacgetega agegeacaea cacaggeace ggageeggea gggeeceete aggeatggtg
                                                                     3780
caggogatge tggtatetgt gegeateage teegtgeagg ggtetgtgte gtteaecagg
                                                                     3840
acctggaget eggageetae atggaggtea tteecatgga tggtgateet ggtgeeceeg
                                                                     3900
gccttggggc ccatggtagg ctccagggag tggaccaggg gcagcacgta ggagaagcgg
                                                                     3960
tecegggaet tgeeeteett agaggegtte aeggteaeca caeetgagag tggteetggg
                                                                     4020
                                                                     4080
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caggocacac caccaatoca cacgoogtgg gocacgtoac tgagoogcog goccaggtto
                                                                     4140
ettectegga tggtcageag ggtcccaceg tecaaeggge caeteagggg etcaategeg
                                                                     4200
cggatctcgg gggcggggca ggtgccagcc atgggctgca gaggcccccg caggcggcag
                                                                     4260
ccatcactcc acatacacag gtgacccagg tcttcgcggc ccaggcactg ggaacagtcg
                                                                     4320
gggctgccca tggcacagtt atagaccatg actgtcatgg gctcagggct gtccaggaat
                                                                     4380
egggetggee geceetttag ttggaggetg agegggaaca cetggetett eegggtegtg
                                                                     4440
                                                                     4500
tgcagcacca cotggtcaca gogtacaaca gactcattca cocacacago otogaagato
                                                                     4560
tectecagee caaaactaca etecaggget geaccetgga aaaaggeagt gttggeeaga
                                                                     4620
ggcaccagga tgttctggga gccacccgta ggcacgggtg ccaggggtga gagcagggtc.
egggggeagt cetgaggget egtggggttt ggtgaggeet egeacegaga etggttggaa
                                                                     4680
acacaggagt gctgctggct gcaccagaaa cagggccact gtgccgacag gcagctggta
                                                                     4740
caggetgtgt gggggtacac ttgtgcagtg cggctgcagt cgtagatggt gaaattggcc
                                                                     4800
ttgacgatgt tccgcccatt gaccctcaca gacatctcaa cagtcacgtg gtcctggttg
                                                                     4860
ggggggaagg gcggaaactg gtccctcggc aggaggttgc agtaggcaat ctggtgacca
                                                                     4920
aaggcagggc ctgggacccg agccacagtg cggatgttgt tcccatagtc acaggccatc
                                                                     4980
tccatgccac tgaggctggg caggctgccc gagatctgca ggatcatgcc tgggtactcc
                                                                     5040 .
tggcgcacat cgatctcgga aggcaggacg gtcatggcag gacagcggct ggggccctcg
                                                                     5100
ctggcactgg tccagaaatg ctgctggctg gaattggtgc agtcctgctg caaggtgcac
                                                                     5160
cgcgtctcca gggcacacca gccgcagtag gcgtccgccg cacccacgca gtccccacag
                                                                     5220
gtggagtgca cgttgcaggc ggcgaccttc accctggcca tctggtggga cgtcatcagg
                                                                     5280
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                                                                     5340
gccacagtca ccacccgcct gctcaccacc tgcatgctct cgttcaggtt gatcttgaga
                                                                     5400
agecteeegt tgacegtgee caggaagace getgtgtagt tgttgaeget ggeeaeggee
                                                                     5460
acggaggtga ggcccggggc gcggaacacg ggcgtggcct tcaggggctg caggatggac
                                                                     5520
agegggtget geaggtgage ageteeacag teeagetget etggetggag etggatgttg
                                                                     5580
agettgeget egeaggeegg teeegtgeee tgeaceaege tgtegageae egecaceaeg
                                                                     5640
tegggegeeg gttecacgaa geaggeggtg egegeagete ggatggegge tegeaegteg
                                                                     5700
gcgaagcgga aggcgcagag tgcggccgga gcagcgcggg ccgcggggga cccctggggc
                                                                     5760
cgctcgaaga cagcaaagag ccgctcccgg gctgggaaga ccgacaccag gcggctgtag
                                                                     5820
aggicgccgc ggcccgcgcc gcccgcgcac tgcaagccca actggatgta ggactcggtg
                                                                     5880
agettettgg egtegeegee ggegeegtgg ggeaggeaga tgegegeeag eaggeteege
                                                                     5940
gcctggctct ccttgtcgcc cgcgcgcgcc tcgctgttga gcgccaggta cgcgtaggac
                                                                     6000
tgtgcacccg gcggcgggtc ggacgggtgc aggaaggcgc tcacgaagcc caqcttqtqc
                                                                     6060
tgctccttgg cgccctgctt gatcttgagg atgttgtcgt cggaggggtt gaggtcgaag
                                                                     6120
gtgaagaget tggecaggte geegegegtg tecagggage ggatggegat etegggegtg
                                                                     6180
ttetegaage ggtggteete eaggetgegg ttgegeggga agaaggaget geegtaaceg
                                                                     6240
gtgtacgtgg cgcccacgag caggcggctg cccccgcgc ccgcggcggg aggcagaact
                                                                     6300
agccccacgg tggacgcgtt cgggtggttg gccgccacgt tcagcatgct ggggaacacc
                                                                     6360
gtgacggget cggcgggcgg cgcggcgggc gggaagcgca cggccacggc cgagatgtta
                                                                     6420
ccccggcgcc gcagctggca gaagccctgg tagatggacc cgcacacgac taccagqccc
                                                                     6480
tggccggggt ccagctgcag gatcttgttg tagttgtccg tgaggcgccg cgggtgctcg
                                                                     6540
```

```
6600
cacgaggect geggeagetg eggagegtga cacageggge tgtegggeac egggeecaeg
geogeology colocaget cagettyges cocsacaset gatasasses gittsacsses
                                                                    6660
gccaggtaca cggtccccgc cgcgccgtcc agggcgaagt tgttggtggg cgtgggcgag
                                                                    6720
                                                                    6780·
gggaaccgac gctggatete cagggegeeg geeegegeeg eeeccaggag cageagcaac
agcageggea cegggeaceg eggeggegte tggaacggeg gggggetgge ggeggeggee
                                                                    6840
                                                                    6900
cgggcgctaa ggggtgcgcc gcccgcggcg cgaggagcca tccgggcgtg cgcgggctgc
                                                                    6960
geggegegge gagtgeatgg ggegaggege ggeegggage egggageeeg gaggeggegg
qaqqeqqqq qeqqqeeegg gteegegagg egetteetge eegegeeage egeeeegge
                                                                    7020
cccggcgccc gggcccggct cagcctcgcc gcgcagcccg g
                                                                     7061
```

```
<210> 4969
<211> 1173
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1174)...(952)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4969
                                                                60
cagagcagga acacacgcaa gaagggactg agaattgtat caacagtgca aaagaagtca
                                                               120
                                                               180
aaggaattac ttacgcataa aatgaggact gttcctcaga gatgagtcag tcctgagaag
ccaaccaagc cgggtactct gagtctggat ccgaccttgc tagaaatacg gtctgaggca
                                                               240
gcagaggttc tatgagagtc cacagaaggt cagcacaggc taaggtaaaa gcagggcaat
                                                               300
360
aaaatgagaa ttggcaaaaa ggtatcatta ggctcatacc taccacaact ctacagccct
                                                               420
accacttacc agaatggata gattcctagt cgtgtaacca taaaaacagc actgaagatc
                                                               480
acaaaaaggg tgtcacagag ccgctgatac ttggcataat tggccagttt ggctgcctgg
                                                               540
                                                               600
agaaaggaag aaagaattga gctggggaga aagtcattcc tctcatagga agaaaagaag
agaagaagaa gatggagaaa gagagattgg gtttttacct ccagcaagaa gtctgagaca
                                                               660
tcatgtagac acatgatcag agttcccact cgaatcatat tgttgatgta ggagaaggag
                                                               720
ataageecaa tggtgaccaa gtgatgeaca aacatgatea ggaagteeta ggaaggaatg
                                                               780
gaaatagaag agggaggtaa aagctgggcc ctagaaacac cagccaaccc aacgtcctgc
                                                               840
attattetet gagaatetta ecceacecea tatagaatag tttecattgg eegggegagg
                                                               900
tggctcatgc ctgtaatccc agcactttgg gagggcaagg tggtcggatc acctgaggtc
                                                               960
aggagttcga gaccagcctg gccaacatgg ggaagccccg tctctactaa aaatacaaaa
                                                              1020
ataageeggg ettggtggea tgtgeetgta ateeeageta etegggagge tgaggeagga
                                                              1080
gaattgctca aacctgggag gtagaggttg cagtgagctg agatcgcgcc actgcactcc
                                                              1140
agcctgggcg acagactgag attccgtctc aaa
                                                              1173
```

```
<210> 4970
<211> 4413
<212> DNA
```

### <213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(4012)
```

<223> similar to gi6014482 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 4970 60 atggcactta agaacattaa ctaccttctc atcttctacc tcagtttctc actgcttatc tacataaaaa atteettttg caataaaaac aacaccaggt geeteteaaa ttettgeeaa 120 aacaattota catgoaaaga tttttcaaaa gacaatgatt gttottgtto agacacagco 180 aataatttgg acaaagactg tgacaacatg aaagaccctt gcttctccaa tccctgtcaa 240 300 ggaagtgcca cttgtgtgaa caccccagga gaaaggagct ttctgtgcaa atgtcctcct 360 gggtacagtg ggacaatetg tgaaactace attggtteet gtggcaagaa eteetgeeaa catggaggta tttgccatca ggaccctatt tatcctgtct gcatctgccc tgctggatat 420 gctggaagat tctgtgagat agatcacgat gagtgtgctt ccagcccttg ccaaaatggg 480 geogtgtgcc aggatggaat tgatggttac teetgettet gtgteecagg atateaagge 540 agacactgcg acttggaagt ggatgaatgt gcttcagatc cctgcaagaa cgaggctaca 600 tgcctcaatg aaataggaag atatacttgt atctgtcccc acaattattc tggtgtaaac 660 tgtqaattgq aaattgacga atgttggtcc cagcettgtt taaatggtgc aacttgtcag 720 gatgctctgg gggcctattt ctgcgactgt gcccctggat tcctggggga tcactgtgaa 780 ctcaacactg atgagtgtgc cagtcaacct tgtctccatg gagggctgtg tgtggatgga 840 gaaaacagat atagctgtaa ctgcacgggt agtggattca cagggacaca ctgtgagacc 900 960 ttgatgcctc tttgttggtc aaaaccttgt cacaataatg ctacatgtga ggacagtgtt gacaattaca cttgtcactg ctggcctgga tacacaggtg cccagtgtga gatcgacctc 1020 aatgaatgca atagtaaccc ctgccagtcc aatggggaat gtgtggagct gtcctcagag 1080 1140 aaacaatatg gacgcatcac tggactgcct tcttctttca gctaccatga agcctcaggt 1200 tatgtctgta tctgtcagcc tggattcaca ggaatccact gcgaagaaga cgtcaatgaa tgttcttcaa accettgcca aaatggtggt acttgtgaga acttgcctgg gaattatact 1260 1320 tgccattgcc catttgataa cctttctaga actttttatg gaggaaggga ctgttctgat attotoctgg gotgtaccca toagcaatgt ctaaataatg gaacatgcat coctcactto 1380 1440 caagatggcc agcatggatt cagctgcctg tgtccatctg gctacaccgg gtccctgtgt gaaatcgcaa ccacactttc atttgagggc gatggcttcc tgtgggtcaa aagtggctca 1500 1560 gtgacaacca agggctcagt ttgtaacata gccctcaggt ttcagactgt tcagccaatg 1620 getettetae titteegaag caacagggat gigtitgiga agetggaget getaagigge 1680 tacattcact tatcaattca ggtcaataat cagtcaaagg tgcttctgtt catttcccac 1740 aacaccaqcq atqqaqaqtq gcatttcgtg gaggtaatat ttgcagaggc tgtgaccctt accttaatcg acgactcctg taaggagaaa tgcatcgcga aagctcctac tccacttgaa 1800 agtgatcaat caatatgtgc ttttcagaac tcctttttgg gtggtttacc agtgggaatg 1860 accagcaatg gtgttgctct gcttaacttc tataatatgc catccacacc ttcgtttgta 1920 ggetgtetee aagacattaa aattgattgg aatcacatta ceetggagaa catetegtet 1980 ggctcatcat taaatgtcaa ggcaggctgt gtgagaaagg attggtgtga aagccaacct 2040 tgtcaaagca gaggacgctg catcaacttg tggctgagtt accagtgtga ctgccacagg 2100 ccctatgaag gccccaactg tctgagagag tatgtggcag gcagatttgg ccaggatgac 2160 tecactggtt atgreatett tactettgat gagagetatg gagacaccat cagectetee 2220 atgtttgtcc gaacgcttca accatcaggc ttacttctag ctttggaaaa cagcacttat 2280 caatatatec gtgtetgget agagegegge agactageaa tgetgaetee aaacteteee 2340 2400 aaattagtag taaaatttgt tottaatgat ggaaatgtoc acttgatato tttgaaaatc 2460 aagccatata aaattgaact gtatcagtct tcacaaaacc taggatttat ttctgcttct acgtggaaaa tcgaaaaggg agatgtcatc tacattggtg gcctacctga caagcaagag 2520 actgaactta atggtggatt cttcaaaggc tgtatccaag atgtaagact aaacaaccaa 2580 2640 aatctggaat tettteeaaa teeaacaaac aatgeatete teaateeagt tettgteaat 2700 gtaacccaag gctgtgctgg agacaacagc tgcaagtcca acccctgtca caatggaggt

```
gtttgccatt cccggtggga tgacttctcc tgttcctgtc ctgccctcac aagtgggaaa
                                                                     2760
gcctgtgagg agggtcaaag gtgtggattc agcccgtgtc ctcacggagc ccattgccag
                                                                     2820
ccggtgcttc aaggatttga atgtattgca aatgctgttt ttaatggaca aagcggtcaa
                                                                     2880
                                                                     2940
atattattca gaagcaatgg gaatattacc agagaactca ccaatatcac atttggtttc
                                                                     3000
agaacaaggg atgcaaatgt aataatattg catgcagaaa aagagcctga atttcttaat
attagcattc aagattccag attattcttt caattgcaaa gtggcaacag cttttatatg
                                                                     3060
ctaagtctga caagtttgca gtcagtgaat gatggcacat ggcacgaagt gaccetttcc
                                                                     3120
atgacágace caetgteeca gaeeteeagg tggcaaatgg aagtggacaa egaaacacet
                                                                     3180
tttgtgacca gcacaattgc tactggaagc ctcaactttt tgaaggataa tacagatatt
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tatgtgggag acagagctat tgacaatata aagggcctgc aagggtgtct aagtacaata
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                                                                     3360
gaaatcggag gcatttatct ctcttacttt gaaaatgttc atggtttcat taataaacct
caggaagage aattteteaa aatetetace aatteagtgg teactggetg tttgeagtta
                                                                     3420
aatgtetgea acteeaacce etgtttgeat ggaggaaact gtgaagaeat etatagetet
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tgcttttcaa acccctgtat ccatggcaac tgctctgaca gagttgcagc ctaccactgc
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tttggaaatt ttacaggaaa attttgcaga cagagcagat taccctcaac agtctgtggg
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aatgagaaga caaatctcac ttgctacaat ggaggcaact gcacagagtt ccagactgaa
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ttaaaatgta tgtgccggcc aggttttact ggagaatggt gtgaaaagga cattgatgag
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                                                                     4020
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atotocgaca tittoaccac tattggctca gtgactgtcg cottgttact gatcctcttg
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ctggccattg ttgcttctgt tgtcacctcc aacaaaaggg caactcaggg aacctacagc
                                                                     4140
cccagccgtc aggagaagga gggctcccga gtggaaatgt ggaacttgat gccacccct
                                                                     4200
gcaatggaga gactgattta ggagcattgt gtcccttcga gatggggatc cacacactgt
                                                                     4260
gaatgtgatg actgtacttc aggtatetet gacatacetg acaatgttaa tetgcaactg
                                                                     4320
ggattacact ggaactacag gaatgattee tttgaccace ttaaaaactt tcacagtggt
                                                                     4380
tccgctcgac accattgttt tattatatta tat
                                                                     4413
```

```
<210> 4971
<211> 1489
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (354)...(1087)
<223> similar to gi861392 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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                                                                       60
agcaggcaag ctccttggcc cctccacact ggtgcctgtg aaggtcctag gctctactgt
                                                                      120
tecttigtet cattlacece catggeeetg gtgeteagea caatceatgt ecagecetta
                                                                      180
ttaggtgttt caggaagtgt ttggatgcag agggtctgca cagggagtca agcctgggga
                                                                      240
gagggaggaa ggtgagggtg gcacggtcag ggctggggag cccgatggtc ggggtcttac
                                                                      300
teccagggat gtectgagea gtgaeggget tgtteetaca ggegetgate eegetggeee
                                                                      360
tggaaggcac ggacgtgggg cagacaaagg cagcccaggc cettgccaag etcaccatca
                                                                      420
cctccaaccc ggagatgacc ttccctggcg agcggatcta tgaggtggtc cggccctcg
                                                                      480
```

```
tetecetgtt geaceteaac tgeteaggee tgeagaaett egaggegete atggeeetaa
                                                                      540
caaacctggc tgggatcagc gagaggctcc ggcagaagat cctgaaggag aaggctgtgc
                                                                      600
ccatgataga aggetacatg tttgaggage atgagatgat ccgccggqca gccacggagt
                                                                      660
gcatgtgtaa cttggccatg agcaaggagg tgcaggacct cttcgaagcc cagggcaatg
                                                                      720
accgactgaa gctgctggtg ctgtacagtg gagaggatga tgagctgcta cagcgggcag
                                                                      780
etgeeggggg ettggeeatg ettaceteea tgeggeeeae getetgeage egeatteeee
                                                                      840
aagtgaccac acactggctg gagatectge aggecetget tetgagetee aaccaggage
                                                                      900
tgcagcaccg gggtgctgtg gtggtgctga acatggtgga ggcctcgagg gagattgcca
                                                                      960
gcaccetgat ggagagtgag atgatggaga tettgteagt getagetaag ggtgaccaca
                                                                     1020
geoetgteac aagggetget geageetgee tggacaaage agtggaatat gggettatee
                                                                     1080
aacccaacca agatggagag tgagggggtt gtccctgggc ccaaggctca tgcacacgct,
                                                                     1140
acctattgtg gcacggagag taaggacgga agcagctttg gctggtggtg gctggcatgc
                                                                     1200
ccaatactet tgcccatect cgcttgctgc cctaggatgt cctctgttct gagtcagegg
                                                                     1260
ccacgttcag tcacacagec etgettggcc agcactgcct gcagcetcac tcagaggggc
                                                                     1320
cctttttctg tactactgta gtcagctggg aatggggaag gtgcatccca acacagcctg
                                                                     1380
tggatcctgg ggcatctgga agggcgcaca catcagcagc ctcaccagct gtgagcctgc
                                                                     1440
tatcaggeet geeectecaa taaaagtgtg tagaacteca aaaaaaaaa
                                                                     1489
```

```
<210> 4972
<211> 887
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (227)...(373)
<223> similar to gi5726241 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4972
cacaatttca geteactgea geeteegeet eecaggtteg ggtgatttte etgeeteagt
                                                                       60
ctccagagtg gctgggattg cgggcgcccg ccaccacgcc cggctggttt ttggtatggt
                                                                      120
tagtggggac ggggtttcgc catgttgacc aggctggtct tgaactactg acctcgggcg
                                                                      180
atcogoctga ctcagoctco catagtgoog goattacagg cgtgagccac cgcctggcat
                                                                      240
ggtgcagaag ctggatacct accaggagta caaggaggct gcgtcctctt accaggaagc
                                                                      300
ctggagcaca ctccggaagc aggtgtttgg atcctggatc agaaacccac cggattatca
                                                                      360
ccagttcaag tgagaaggaa atgtttgctc tggtagcagg accettcatc ctgaactgcc
                                                                      420
ttcctccacg caggacaagt cttagctttt ttggtagtta aatcagggaa cattctttct
                                                                      480
gagetttgea tetetgttgt gtaatacaga tggaatetgg aacttagage aagetatact
                                                                      540
tgattgaagt agctctctgc taaaatggca tctcactaat gacctcacta tctgacttcc
                                                                     . 600
attgtgtttt attgcttctc taaaatatga aatcagagtt tggaacatga tgctttgaaa
                                                                      660
gtactctgca gcagctctgt tttatgggtt cctacattga ttcagcaaat atttattgag
                                                                      720
ctgaaatgat gtttgacgct ctgcaagttt tacagctttg cctagcatag cgaacatata
                                                                      780
ttttgtattc ccagcctttc tttcttcagg gagccattct tttcccattc ttcagtgatc
                                                                      840
ctgctctgtg cctcagactt ggctgaaggt aaccttactc cctggct
                                                                      887
```

```
<210> 4973
<211> 2550
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(2156)
<223> similar to gi473522 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

#### <400> 4973 gatggcgcgg gagctatacc acgaagagtt cgcccgggcg ggcaagcagg cggggctgca 60 ggtctggagg attgagaagc tggagctggt gcccgtgccc cagagcgctc acggcgactt 120 ctacgtcggg gatgcctacc tggtgctgca cacggccaag acgagccgag gcttcaccta 180 ccacctgcac ttctggctcg gtaaggagtg ttcccaggat gaaagcacag ctgctgccat 240 cttcactgtt cagatggatg actatttggg tggcaagcca gtgcagaata gagaacttca 300 aggatatgag totaatgact ttgttagcta tttcaaaggc ggtctgaaat acaaggctgg 360 aggogtggca totggattaa atcatgttot tacgaacgac otgacagcca agaggotoot 420 acatgtgaag ggtcgtagag tggtgagagc cacagaagtt ccccttagct gggacagttt 480 caacaagggt gactgcttca tcattgacct tggcaccgaa atttatcagt ggtgtggttc 540 ctcgtgcaac aaatatgaac gtctgaaggc aaaccaggta gctactggca ttcggtacaa 600 tgaaaggaaa ggaaggtetg aactaattgt cgtggaagaa ggaagtgaac ceteagaact 660 tataaaggta ttgggggaaa agccagagct tccagatgga ggtgatgatg atgacattat 720 agcagacata agtaacagga aaatggctaa actatacatg gtttcagatg caagtggctc 780 catgagagtg actgtggtgg cagaagaaaa ccccttctca atggcaatgc tgctgtctga 840 agaatgettt attttggace aeggggetge caaacaaatt ttegtatgga aaggtaaaga 900 tgctaatccc caagagagga aggctgcaat gaagacagct gaagaatttc tacagcaaat 960 gaattattee aagaataeee agatteaagt tetteeagaa ggaggtgaaa caccaatett 1020 caaacagttt tttaaggact ggagagataa agatcagagt gatggcttcg ggaaagttta 1080 tgtcacagag aaagtggctc aaataaaaca aattcccttt gatgcctcaa aattacacag 1140 ttctccgcag atggcagccc agcacaatat ggtggatgat ggttctggca aagtggagat 1200 ttggcgtgta gaaaacaatg gtaggatcca agttgaccaa aactcatatg gtgaattcta 1260 tggtggtgac tgctacatca tactctacac ctatcccaga ggacagatta tctacacgtg 1320 gcaaggagca aatgccacac gagatgagct gacaacatct gcgttcctga ctgttcagtt 1380 ggatcggtcc cttggaggac aggctgtgca gatccgagtc tcccaaggca aagagcctgt 1440 tcacctactg agtttgttca aagacaaacc gctcattatt tacaagaatg gaacatcaaa 1500 gaaaggaggt caggcacctg ctccccctac acgcctcttt caagtccgga gaaacctggc 1560 atctatcacc agaattgtgg aggttgatgt tgatgcaaat tcactgaatt ctaacgatgt 1620 ttttgtcctg aaactgccac aaaatagtgg ctacatctgg gtaggaaaag gtgctagcca 1680 ggaggaggag aaaggagcag agtatgtagc aagtgtccta aagtgcaaaa ccttaaggat 1740 ccaagaaggc gaggagccag aggagttctg ggaattccct tgggagggaa aaaaagactt 1800 acccagacct tcaccactác tggaaaccca ggctgaagac catccacctc ggctttacgg 1860 ctgctctaac aaaactggaa gatttgttat tgaagagatt ccaggagagt tcacccagga 1920 tgatttaget gaagatgatg teatgttaet agatgettgg gaacagatat ttatttggat 1980 . tggcaaagat gctaatgaag ttgagaaaaa agaatctctg aagtctgcca aaatgtacct 2040 tgagacagac cettetggaa gagacaagag gacaccaatt gteateataa aacagggeea 2100 tgagccaccc acattcacag gctggttcct gggctgggat tccagcaagt ggtaaattgg 2160 tatttgtaaa aagcaaacaa acattacaag gcagttatct cattgctgtt ttgggagagg 2220 aacgggaaaa gotttttgot tatttgtott ttgaaaatta aggotgggog oggtggotoa 2280 cacctgtaat cccagcactt tgagaggatg aggtaggcgg atcactgggg tcaggatttc 2340 gagaccagec tggccaacat ggcgaaacet cgcctctact aaaaatacaa aaaaattage 2400 tgcgcgtggt ggtgcacgcc tgtagtccct gctacttgga aggctgagac aggaaaattg 2460 cttgaaccca ggaggetgag gttgcagtga gccaggattg cgccaccaca ctccagcctg 2520

```
<210> 4974
<211> 1100
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(238)
<223> similar to gi5834580 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4974
actggaaagg aaacttttct accetgagtg cgagataaga acgatgggtg gaagagagca
                                                                       60
acgccagage ccaggegece agaggaettt ettecagett etgetgteet tetttgtgga
                                                                      120
gagcaagete cacgaccacg étgettaett agtagacaac etgtgggaet gtgcagggae
                                                                      180
tcagctgaag gactgggagg gtctgacaag cctgctgctg gagaaggacc agagcacgtg
                                                                      240
ccacatggag ccagggccag ggaccttcca cctcctaggg tgaaaccagg agggattgct
                                                                      300
tgcttcactt gtacaaggca ggaacggtgg catcgggtgg gggaaacttg gagttggaag
                                                                      360
gtggctaatc tttgattcta tgtttttgat cctcctggca ctccagacct gggtgatgtg
                                                                      420
caggagagca cactgataga aatcettgtg tecagtgeec ageaacteet geetcageet
                                                                      480
cccgagcagc tgggactaca ggcgcccgcc accacgcctg gctaactttt ttgtattttt
                                                                      540
ggtagagacg ggttttcacc gtgttggcca ggatggtctt gatctcttga ccttgtgatc
                                                                      600
cacctgcctc atcatcccaa agtgctggga ttacaggcgt gagccactgc gcccagcatg
                                                                      660
ttagacaatt tttaattcat cctctctgtg ctgttgtttt ctcagctgtg aaaggaatat
                                                                      720
tetggtgggg acaaggttae agagttgetg agagggtete atgaeatgaa ggtaetggee
                                                                      780
ttggcacagt gcctgggggg gcggggactc cgcacatgcc tgtgatgtca cagttactgt
                                                                      840
cagttcacag cgaaccttcc ctccttttcc tgttgacttt cccacactcc tgtaaccctc
                                                                      900
ectecetece ttetteetet etetetete cacteaegea caegeaeaea caeaeaeaea
                                                                      960
cacacactee atteactgte tecatgacte tggagtaaac taacgteteg agttgecatt
                                                                     1020
ggaagceeca ttgteeteat ttagaettte atgggttata ggeaettttg aetteetggg
                                                                     1080
gteettette agataaaaag
                                                                     1100
```

```
<210> 4975
<211> 885
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(886)
<223> n = a,t,c or g
<220>
<221> misc_feature
```

<222> (850)...(652) <223> similar to gi3659694 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
. <400> 4975
tttttttttt ttgagatgga ttgaagcgac tgcctttatt gcatagacct tttcaattgc
                                                                       60
tttttagatt ggggacggag gacgcgcatg agacgaacag gggatatgaa tttccccgcc
                                                                      120
cccacccgcg ggtagaggaa cattaggtgc aaatcctagc gccggccccg gggaacctgc
                                                                      180
ccctcctggg ctgattggcc agctaaatgg aggcaccgga gtggatgggg cgaggctgcg
                                                                      240
ggeeetgaee ggeegaetea etgaggeeta eeccageeag tacatteeag gteetgteat
                                                                      300
tgggcgacgc gtaaaataga ctccgccctc agccatcctg gccgggtagg agcaggtggc
                                                                      360
aagegteagg aetgageeet geeeegtaag ggeggeeeea gateagaege eaggeeeege
                                                                      420
cctcattgat caggcactac cctcgggacg agcccatttc tctttaaccg tgacgacgcc
                                                                      480
caccttccag catcacgtct ggtcccatga aagcgagcgc aatcctgaga cggggccagg
                                                                      540
geceetgeea ceacaactet ageageeagg ceacaceeee tageteagge teegeeeeat
                                                                      600
tggaatgtag gccccgcccc cggcgggtac caagettgtt tagtttcagg gctcccgccc
                                                                      660
cgggcagcca ggaggcccag tgagcagtgt accgatgcca gggtgcatct gtgcctgtag
                                                                      720
eggeceatae tecacetget eccegtecae tgtgageaeg eegegtggtg tgageggete
                                                                      780
taggoggaag geacggaceg eggegtagee cagetgegga cageceagge tgaagtgget
                                                                      840
accacgetee gaatteence geactggact agggatgnte aacat
                                                                      885
```

```
<210> 4976
<211> 2467
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2463)...(1784)
<223> similar to gi5304869 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4976
ttttttttt ttaccactta gattaagtta tgaaatttat ttatagtttt accttatata
                                                                       60
aaagccatgt atatatcaaa tctcactttc ttggtaaagt catcttatta gaaatacaag
                                                                      120
aagtgcactt aatacaagga agtaagtttc teggtgccac caggtgaggt ggtacataca
                                                                      180
ctcacatcag tecetcaaac gaaggtttte ggcagattte eeettecaga ettetgagat
                                                                      240
gatetgaatt eaggaaggte tgagtgaact tetteeagaa attacagtga aacaagetga
                                                                      300
cettaaettt tgggteetee egagaaatae taatgaaaaa aetatttttt teeagtggge
                                                                      360
cctgtgtttg ctggcttctc ggcatctgca gctcttcacc ggcaggcgcg gagcccaca
                                                                      420
gcagcagtgt acaagcgcga ggtagcactt gcagccccat cagagacata tgacatcaaa.
                                                                      480
aaaccaacct aaacccatat geettttggt caatcagagg ttetgeteet acagattagg
                                                                      540
ctgacagete ttggacttat atttattaat atttgtgaaa tatgaactee aaggttettg
                                                                      600
agctgttcct aaagcaagtt tccagcaaca gcttttatta acaactgttc atcttgcgat
                                                                     .660
gtgctgtgcc ttatgaacga tgtctcgtca gaacagacca ggggtggtac tgggtttcct
                                                                      720
atagettete tetgeateta caaageaggt ttteaaaeae attttacatg tegaaaceag
                                                                      780
tgtcataagg aaaacatttg tgacagaaaa acaatgctca gtttaatcta agttaccaag
                                                                      840
```

```
cagaaggtaa aagaactagt atccgctgag tccccaaacc tctttcttct aattcatctg
                                                                      900
aggatttttt gtgcttctag aacaagaatg taggcaggct cccaaatgga gaggtaaaca
                                                                      960
tgaccgcgtt gtttgaaact acttcattaa tttgtaaatc agaaccaaaa agctctggcc
                                                                     1020
ctcccacttc tcttagctga ccctcctccc cacttacgga taaacagact ttaacttccc
                                                                     1080
taacccagaa acacttccac caaaaatgta tggttatacc ttatcctaaa aaggcaccat
                                                                     1140
gcaggcattt aagactgaac cagtgaactc taagtatgta gtagtagaaa atatcactaa
                                                                     1200
tcaaaactte cagcatcaga tggtacaaaa ccccaagagg actggtgaca tgtaccccgg
                                                                     1260
ggatggccaa ccccagcttc ttggcaaccc cacaagccca agcggggagc ttcagctctg
                                                                     1320
gteaggtgea eggetgeeaa agtetgeaca eettgggggae aaggaaagga gacaettget
                                                                     1380
tcattgtgct attcatgacc cagaaaaggt cctggctggc ttgaaggacc cgagagacaa
                                                                     1440
acactggatg ggaggaatga gtgtgaaaca agaggtggag aagctagatt atcttccaca
                                                                     1500
ggaggcggca gaagctccag gaagtagccg agaaccaata cgaactcgac cgtgtgacaa
                                                                     1560
acaaggttaa cagtagggga agacagcttt ggcaagagcc caaagggaag agaagggctg
                                                                     1620
acctggggac ccacttcccc tgtcagaagt gaccctgtcc caatgccatg gctcattttc
                                                                     1680
aggtctgttg aacaggtaag gtacaggagt catagatttc acgtttaata tgtaatggaa
                                                                     1740
getetgtaac atgagacaga tagcaagcac ggactetget caetggtega tgatggageg
                                                                     1800
ctgcaacacc tgattcatca tgtcctcttc atcaacatca taatccacaa aagtgtcata
                                                                     1860
                                                                     1920
agaaaaccgg tgccggcgct ggatgtgctc tctgaagttg gcgctgcggt agttggggtc
tccccagggc atcgaggcac atatcggaca aaccacagat ttggtatccg tgctatggaa
                                                                     1980
taatttgcag tgttccacaa gtccttcctg atcaaagttc ttctcaggac agtaaggaca
                                                                     2040
aggaaaggtg taacggtttg gaacatteet tggetgaaga gatgeateet taatggtgge
                                                                     2100
cttcacacct tccatgatgt aattctggta tttggaacaa gtagccacgt gggaccggat
                                                                     2160
cttggacagg aagaaattct tacggcagcc atggcaagaa gtctctgtgc tctcgatctg
                                                                     2220
ccgctcgagc tccacggctc ggacgccagg tgccagagcg ctgcgacaca ccccacagac
                                                                     2280
aggettette ggetteagae attectgeag geatgeagag caaaagaegt gteegeaggg
                                                                     2340
cacctgtacc ggcttctcgt acacctctaa gcacacggga cacgtgaagc gtcctagggg
                                                                     2400
gtcagcetce geegeeggee eegecagetg egeageacee eegeagteee getgttgege
                                                                     2460
                                                                     2467
cacgaaa
```

```
<210> 4977
<211> 1010
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1011)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (19) ... (120)
<223> similar to gi5930071 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4977

cttcttcttt ttaacctcag gttaacccca aagattgtct tttcttggag tgaaatcagg 60
aacatctctt tcaatgacaa aaagtttgtc attaaaccca tcgacaagaa ggcacctgta 120
agttccaaag gattctattc aggggctact actttttcat tcttatactt gtcagggtaa 180
cggacaagtt atactgtgac gagtagccag tgatagtcca aactcctcat gaggttacat 240
```

```
300
tgagggccag agatectgtg ggccaggcaa ttgctgcagg ggagaccact taacttttca
aatgattoto attoottatg aagaaaaggg cagttotgag coattggcca aatgataagc
                                                                      360
atttcccaaa atgctgtgtt tttggtgtgg agagccagcc tgtccccttg accacctggg
                                                                      420
tgcagggact ctccccggca cctgacggac agtgggacct gcgagtctca agggccagat
                                                                      480
ttgcctttca gagctgtcct ggaacttacc caagataggg acagtcagac ttgcacccaa
                                                                      540
                                                                      600
gcattgctgg tgcccaaggt ttcatcgggg cttcacccac ttctgttgtc agaggtgtgc
                                                                      660
atcctcacac aggtgacact ggcaggcagt cattttggga ggacatggta agaaggcgac
                                                                      720
actttatgtc ctgaaatctg atagtattga ttgtaatagc tgcaaagacc agtgcattat
gtaaatttgg ttttatttat tcttctgaca tttaaacttt tgttaactca gaatatttga
                                                                      780
                                                                      840
gacatacgca cataactgta gcattgtaga atgggtaagg attttgttat ctaatcagaa
                                                                      900
atctaqttct ctaaaaaaat tgccacctga aggaaattct gttaccacct taggagcctg
ttctggaatt ttacgaaaat tataggatgg ggaaagggac ttttgtgttc ctccatggtt
                                                                      960
antttttgtt nccctaggtt accagtgttt aagccttggg gggagggcca
                                                                     1010
```

```
<210> 4978
<211> 1001
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (927)...(556)
<223> similar to gi4584796 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4978
                                                                       60
ttttttatca ttgacaatgt ttattatcaa gaaactttag gttttttaaa agaatgctcg
ttttagaata caccaagagg acactctgtg acaggacata tacaaacaag gataattaaa
                                                                      120
atattaaata ctatctaaat taaaagacca taattcaaat tgctaattat aatatttgtg
                                                                      180
teggtagaaa taactatagt teecetteat gaaatteace eccaegttet catgaagact
                                                                      240
                                                                      300
atgacqtctc accacaattt cagttattta atttacaata atcaatgctg agttttctgt
                                                                      360
gctgaagcat gcactgttac agaaagcaca aaatcctatt tacagggatt tttagttttc
tttaaaatgt atctcaagca tcttttaaag tgcgagctac aaataggttg tatccttaat
                                                                      420
gaaaaaggct tctttctaaa agaagtatga gatagctatc caatactgca ggaacagtta
                                                                      480
                                                                      540
tataactaac cqaaqqaacc agcagcactc tgctaactct gttttagtgt agcaacctcc
ttcttggtgt tctactacca gccaaacatg tactccattg ctttggatac aagactttca
                                                                      600
                                                                      660
totttttttg gegtttgtot gtoagaaata acctgataat cactagtaga ggotttgtat
                                                                      720
gctgtagcaa gaggtctcat ggtagaaatc ctaggagtac ttccaggttg tgttggtgta
cctagagttt tgattggtgg tgtaaaggct aaagatggag atgataaagc acatctgtca
                                                                      780
                                                                      840
ctgctttcca taacactttt gtcaatacat ggttttacac caatcatgat ggattctcca
                                                                      900
aaaatcctcc catctttgct taaggctttc cgagcctgca gtttagattg ataacgaata
tgcatccaat ttcctgtatt agacatctgc aaagaataaa gctgtctcgt aaaatagaaa
                                                                      960
atatataaaa totgootota atgaattota otagaaaata g
                                                                     1001
```

<210> 4979 <211> 2745

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2747)...(1928)
<223> similar to gi574804 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4979
tttttttttt ttcaaatgta ggttgtttta ttgtaaatgt catcaaaatc cagaacagca
                                                                       60
gaaacatatt aatcagtttg aaattttaga aatcetttag caettgaaaa agagtattae
                                                                      120
aaatgcatct atatcacata gaaagtcagc gaatacaaac tagacaagca ggacatagtt
                                                                      180
cttttctggc attccaggat aataagaata tttatcaatt aaaaggtcaa tatctgtctt
                                                                      240
cetgaaataa eteeaaacet gagteaacae acattetttt eggattggtt etgaetggeg
                                                                      300
taagaagaga aatacagcat tttgtttttt attttgttta tctaatcaca gggaaggata
                                                                      360
aacaaagggc aaaagtgaga gaaaaagtta gatgtccttg aatttttttt tttagtggtt
                                                                      420
gctactgcat ttcatgtttc atttttgtta gatcatatac attagaaaag aatgatacat
                                                                      480
tttagagaag aaatatgtac atacatagta tcagaaataa ttttcttgta ttqattcatt
                                                                      540
taatatggtt gtgcttatat tcaatcagaa ggtcaactcc tttgctctaa ggttcttaca
                                                                      600
ctgctaacaa gaaatggctt ttttcctgtt gcaggtcatg agcagcacac agtgtccttt
                                                                      660
ctaggcacat aggatcatog atcactgtgt ggacgcaggo taatcagaat tgcacctgaa
                                                                      720
atcacttgtg caattagtga tgcaagagtg atcacaggaa tcaagactgg gagccaagag
                                                                      780
aaagaacaag aggtgcacaa agaagcagtt cggatgggag accaggaaag ctgaggggaa
                                                                      840
aactgggaaa cagattotgg aaaactoaca gtttgtttga tacccagggt taagagatgg
                                                                      900
gactttgata ggagtggtgc ttatgaatta agggaggaag aaagaggtga gatcctaatg
                                                                      960
ttggtaaagg tacagagaca aagggagcca accaagtggt aagaaactta gaaatggaaa
                                                                     1020
gtaaaaatga gacttaattc tttagtcagg gaagccaagc caccaggaaa acttggtaaa
                                                                     1080
gagtaagaga aagagggaga aaatatgaga taatattttg ggtattttgg tataactagg
ggaaccaaaa tattattcct atagtataaa aaggaacaaa gtaaagcaat atggatctat
                                                                     1200
tgggattece tattecacca atgaaaatta teaaacaata atttgtetet caggeaatge
                                                                     1260
tactagaagt tacttatata gttgccttat tgttcattta atttcagttt aactgaagcg
                                                                     1320
attitigecet titeetteet tetaegiggi caeteigeig tieaaagggi aageaecatt
                                                                     1380
tgttcaggta aagcaattgg tgtttgaaat ccttccgata gatacgccat ctcagagggc
                                                                     1440
tgctaatata actaactgta caagacacac ataattttag gttggccatt cttgtgtata
                                                                     1500
ggggtaatct aaagctagta gttacacccc acaaaagaaa ataaattctt atgacctctt
                                                                     1560
tgatcccacc tgaaatatct cacaataaac aaacaaataa ataataagca aacaaaaaca
                                                                     1620
aacagtagcc ttccccagtt gcaggggcct aaaatatctc ctaatctgaa tttcgtctca
                                                                     1680
ggacaggaaa ctattccata ggcttcctcg caggcttctg tgctggagtt tgtcccactg
                                                                     1740
actitggitg tocatcictc tacaagaagg gaacattcig aaacttagit taaatactac
                                                                     1800
taggccttag aatcttttgt aggtagttgc tgaaacttga agttgaataa tactttgaag
                                                                     1860
tactatgtta cattgcatta tgaaaacctt catttttgta gctgtctctt gatctgccca
                                                                     1920
acatgicaca caaatataga agaaacggaa teigeaatae cacaaacatt acticecati
                                                                     1980
ttgacatggg cataaccatc tactccccaa gaacttcccc aggaattccg cacaatccaa
                                                                     2040
tatggagtgc ttcctgtttt atcaaaccca gttatgagaa ctgcatgatt tgcttctcca
                                                                     2100
ctagagcagt gatgctgtat aatgcctccc agataatctt gccagctcac tgcatctact
                                                                     2160
atgactacca aagggccaaa ggtaagaagt gcttttgcca tttcatcttc ttggtcactg
                                                                     2220
aagtcatatg cagaataacc tttgattgaa aatccagaat gtgaaccaga aaagtaatgg
                                                                     2280
cacagaccat titigigctit aaaaggatat totgaatott toaccagitt tactigcato
                                                                     2340
ttgtttaacc agttcaaagc attgagagta gagcctccat tgcagccata attattatac
                                                                     2400
gaacagtcaa tgacctgctg gacacttagg tettecaggg getteceett tattgcataa
                                                                     2460
gcagattcca ctgccccac cacgctgaag gcccagcatc ctccacacat ctgctggttt
                                                                     2520
ctcacttgtg tcacaacctg cttgtccctc cagtcaaatc ttaacggcaa agacacattg
                                                                     2580
gggatggaca tatgtacttc tgctgagtat ctgggaaact tggaaggttt gcttcttaaa
                                                                     2640
```

```
<210> 4980
<211> 1377
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (42)...(951)
<223> similar to gi3979818 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 4980
ggaaagtaac aggcaacgag atgctgggcc tcgaggaggg ggaccttgaa gacgacttcg
                                                                       60
accetgeeca geacgaceag eteatgeaga agtgetttgg ggaegagtae taeggggeeg
                                                                      120
tggaggagga gaagccacaa tttgaggaag aagaagggct tgaagacgac tggaactggg
                                                                      180
acacgtggga cgggcctgag caggagggag actggagcca gcaggagctg cactgtgagg
                                                                      240
accccaactt caacatggac geegactacg accccageca geegaggaag aaaaagegeg
                                                                      300
aggececett gaegggeaag aagaagegea agtegeeett egeegeggee gtggggeagg
                                                                      360
agaagcccgt gttcgaaccc ggggacaaga cgttcgagga gtacctggat gagtattacc
                                                                      420
ggctggacta cgaggacatc atcgacgacc tgccctgtcg cttcaagtac cgcacagtgg
                                                                      480
tgccctgtga ctttggcctc agcactgagg agatectege tgctgaegat aaggagetga
                                                                      540
accegetegete etceetaaag aagacetega tetacagete agageagega gagetegegeg
                                                                      600
acaagcgggc gtacagccag aaggcccaga actcatggaa aaagcggcag gtcttcaagt
                                                                      660
cactetgeeg agaagaggea gagacacetg eggaageeac agggaageea cagagagätg
                                                                      720
aagccggccc acagaggcag ctgccagccc ttgatggcag cttgatgggg ccggagagtc
                                                                      780
ceccageaca ggaagaggaa geecetgtat caccecacaa gaageeagee eeccagaage
                                                                      840
ggaggagggc caagaaggca cggctgctgg gccccactgt gatgcttggt ggatgcgagt
                                                                      900
teageegeca gagaetgeag geetttggee teaaceecaa aeggetgeae tteegecage
                                                                      960
tgggccggca gcggaggaaa caacaggggc ccaagaacag ctcctgagca ccagggagca
                                                                     1020
ggcaggggcc tcaggctcct ctcctcaaat caagccctgg acaggtctcg cacccacaag
                                                                     1080
tactatetge tgeagagate eteteatetg tggeeaggea egeetgtaat eecageaett
tgggaggccg aggtgaaagg atcacttgag cccaggaatt ggagaccagc gtgggcaact
                                                                    1200
tagegagaet ceatetetae aaaatgtggt gacacatgee tgtagteeca getacteagg
                                                                     1260
aggotgggga aggaagatca ottaaggoca tgagtttgag gotacagaga gotatgattg
                                                                     1320
caccactgca ctccagcctg ggcaacaaag caagaccctg tctcttgaaa aaaaaaa
                                                                     1377
```

```
<210> 4981
<211> 1175
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (171)...(377)
<223> similar to gi3876146 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

```
<400> 4981
cacctcagcc tcccaaggtg ctgggattac aggcgtgagc cactgcgccc ggcctatgag
                                                                       60
                                                                      120
tcagttttat atgtggtggc tctacaggag ggcccagccc cttagtgttg aggggaggac
accgaaagta agctgttcac tacttacttc tttaactttt acttgattta gttctgaaaa
                                                                      180
ctcgaatcca aaccctcaag aaaggcctgg gcgaggacat gtacagtggg atcaccgact
                                                                      240
gtgccaggaa actctggatt caggagggac catctgcctt catgaaaggc gctggctgcc
                                                                      300
gggcactggt catagcacct ctctttggga ttgctcaagg ggtctatttt attgggattg
                                                                      360
gagagegeat ettaaagtgt tittgactaga cagagetgga ggicaagtee etgegetige
                                                                      420
                                                                      480
egecetetet etagetgttt caettageet agagggggea agggeaggtg gggeeaetet
                                                                     • 540
ggcctgcctg gtcctctgcg ttgtagtgct acctcaatct cgggagaaac agccctatat
                                                                      600
tctaacaagt tgagcacagc cttcttcccc ttcgtgtcta cactcgtttt cctttgtggg
cacagetace aggggetttt ggaageeeet aaceacetac ttttcaacaa aaatggtact
                                                                      660
ttegttgtat taattgeagg acettaaeag gtagteaeaa tagaagggtt gtttetgtat
                                                                      720
tttaacattt ctatttcaca gtcaaactcg gcattcttca gtcagcttga ggatttagca
                                                                      780
ttgttaatct tggactccat aacttatgag tcctagcact gattttgagg aaaaggagga
                                                                      840
                                                                      900
tcagaagttc aagggaccgt gaaagccctc agagtcagca cctagtttga gaccaagcac
cettregaat ceetggatgg etgaggggge tgaggeegge tetgaetggg cageteagee
                                                                      960
cctccccag agcccagggt cttgcacacc cctccctgta accaaggaac actctgaaat
                                                                     1020
aaaggtgaat ggctaaaatc tcatctgttc atcagtgggt acagcagata ggctgcagtg
                                                                     1080
aatgctatca ccatctactt ttctacgtcc atttcaaaac caaacattaa aaagggcata
                                                                     1140
gaagcagacc cccgtcactc ttcaaactga tactt
                                                                     1175
```

```
<210> 4982
<211> 791
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(448) (
<223> similar to gi6015436 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4982
ctggaaggac aatggagcac cagctgagaa gctcatcgtt ggattcccta cctatggaca
                                                                       60
caacttcatc ctgagcaacc cctccaacac tggaattggt gcccccacct ctggtgctgg
                                                                      120
tectgetggg cectatgeca aggagtetgg gatetggget tactaegaga tetgtaeett
                                                                      180
cctgaaaaat ggagccactc agggatggga tgcccctcag gaagtgcctt atgcctatca
                                                                      240
gggcaatgtg tgggttggct atgacaacat caagagcttc gatattaagg ctcaatggct
                                                                      300
taagcacaac aaatttggag gegecatggt etgggeeatt gatetggatg aetteaetgg
                                                                      360
cactttctgc aaccagggca agtttcccct aatctccacc ctgaagaagg ccctcggcct
                                                                      420
gcagagtgca agttgcacgg ctccagctca gcccattgag ccaataactg ctgctcccag
                                                                      480
tggcagcggg aacgggagcg ggagtagcag ctctggaggc agctcgggag gcagtggatt
                                                                      540
```

```
600
ctgtgctqtc aqagccaacg gcctctaccc cgtgqcaaat aacagaaatg ccttctggca
                                                                   660
ctgcgtgaat ggagtcacgt accagcagaa ctgccaggcc gggcttgtct tcgacaccag
                                                                   720
ctgtgattgc tgcaactggg cataaacctg acctggtcta tattccctag agttccagtc
                                                                   780
tettttgett aggacatgtt gecectacet aaagteetge aataaaatea geagteaaae
                                                                   791
caaaaaaaa a
     <210> 4983
     <211> 739
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
   . <222> (3)...(337)
     <223> similar to gi310100 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 4983
agatageteg etgttgtttt tgetteagte etggtggaga ggacaetgaa gageageage
                                                                    60
cggggaagga gggaccacgg gtcatttatg acgagaagaa aggcaccgtc tacatctact
                                                                   120
cctacttcca cttcgtgttc ttcctagctt ccctgtatgt gatgatgacc gtcaccaact
                                                                   180
ggttcaacta cgaaagtgcc aacatcgaga gcttcttcag cgggagctgg tccatcttct
                                                                   240
gggtcaagat ggcctcctgc tggatatgcg tgctgttgta cctgtgtacg ctggtcgctc
                                                                   300
ccctctgctg ccccacccgg gagttctctg tgtgatgata tcggcggtcc cctgggcttt
                                                                   360
gtgggcctac agcctggaaa gtgccatctt ttgaacagtg tccccggggc agggactggc
                                                                   420
480
agetttttae ttttgaaatt caaaaagaaa etaceagttt gteecaaagg aattgaaatt
                                                                   540
ttcaaccaaa ctgatcatgg ttgaaatatc ttacccctag gaactggata ccagttatgt
                                                                   600
tgacttcctt ctgcatgttt ttgccaaaac agaatttggg gcacagcatc ttttcacagg
                                                                   660
gataaaaaa tettgtgggg ceagteatte ttateetegg aatagaaaaa categeeata
                                                                   720
attttgagtt cccaacgcg
                                                                   739
    <210> 4984
    <211> '1212
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc_feature
    <222> (1)...(1213)
    <223> n = a,t,c or g
    <220>
    <221> misc_feature
```

<223> similar to gi1438534 in the genepept database release 114,

<222> (1152)...(465)

## Run with FASTXY 3.3t00, default parameters

```
<400> 4984
                                                                       60
ttttttttt tttggaaaag agaaagtaaa gatattccta attcagagcc aaaggtacac
                                                                      120
agcagctgtt ggcgggaggc cacctagaga tttatcaagg acgcgccacc ccaccaggag
cccctcttga tcaccaagtg ctttatcttc caagtagtaa gtcaatcaag aggtttctaa
                                                                      180
agataatcca tttttgataa attagaatgg aaacagtgtc tctataatat acatacaaaa
                                                                      240
                                                                      300
gtgtcccagt tttcaactgt gagcaacaca ggtgcacaga ccaggtgtca gcgcaggaac
ccgacggcag gcatgctgat gccccccatt tcccgccact cccgacagct ccccgggcat
                                                                      360
ggccccgatt cccgccactc ccgacagctc cccgggcatg gccccgattc ccgccactcc
                                                                      420
cqacagetee eegggeatag eeegtgattg eetggeetea geeeteggee eeetgegtgg
                                                                      480
geggeteete eeeggeetet ggtttettgt geetgegeat gtgeetgtae ttgteeaegt
                                                                      540
                                                                      600
acqccttcac caggttggcc accttcacgg ggttgatctc tccactcttg ctgtggcaga
tettetgeac ggeettgege aggatgteet tgtacteete ettggteace tecetettet
                                                                      660
ggtagaaggg cttgatggcc agcttcacct cctccacagc acgctcctgc atgtgcagct
                                                                      720
                                                                      780
tetteatgta etecteette tiggittitet eegeagetag eetgggggee ggggtettet
cetecgagtt getggetgea gtggettgae tggetggete tgaggetggg gteagggeag
                                                                      840
                                                                      900
cqqqcactgg ggccagggtc tgtgctgccc cacagcccac tagcggcagg ctcccctgaa
                                                                      960
qqatqaactg gaccgtgggc tggctgacca gtgcgcaggg tgggatgctt gagggctggg
                                                                     1020
ccggggcagg cggcaggccg gggctgtaaa cctgagaggg gtctgtgtct gggaacccgg
                                                                     1080
gttccggaag cacgtgactg ggaaagggca gctcggagaa cgcctgcctg acccctgtgg
gggccacate etecatgice caggeteett eteggggett etgiggeetg tgaagtggtg
                                                                     1140
cccctggggg cccgacagac agggaggtgg gaatacggcc actcgagacg gtgatcgagg
                                                                     1200
                                                                     1212
cnnnnagete ce
```

```
<210> 4985
<211> 2299
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(1871)
<223> similar to gi5430747 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4985
                                                                       60
gggtttcaga aagtgctttc tctctgtgga catgaggatt ggattagagg agtggaatgg
                                                                      120
gcagcettig gtagagatet titgetagea agetgiteae aagattgeet gataagaata
tggaagetgt atataaagte aacatettta gaaaeteagg atgaegataa cataagaetg
                                                                      180
aaagaaaata cttttaccat agaaaatgaa agtgttaaaa tagcatttgc tgttactctg
                                                                      240
                                                                      300
gagacagtgc tagceggtca tgaaaactgg gtaaatgcag ttcactggca acctgtgttt
                                                                      360
tacaaaqatq qtqtcctaca gcagccagtg agattattat ctgcttccat ggataaaacc
                                                                      420
atgattetet gggetecaga tgaagagtea ggagtttgge tagaacaggt tegagtaggt
                                                                      480
gaagtaggtg ggaatacttt gggattttat gattgccagt tcaatgaaga tggctccatg
                                                                      540
atcattgctc atgctttcca cggagcgttg cacctttgga aacagaatac agttaaccca
                                                                      600
agagagtgga ctccagagat tgtcatttca ggacactttg atggtgtcca agacctagtc
```

```
tgggatccag aaggagaatt tattatcact gttggtactg atcagacaac tagacttttt
                                                                      660
gctccatgga agagaaaaga ccaatcacag gtgacttggc atgaaattgc aaggcctcag
                                                                      720
                                                                      780
atacatgggt atgacctgaa atgtttggca atgattaatc ggtttcagtt tgtatctgga
gcagatgaaa aagttottog ggttttttot gcadotogga attttgtgga aaatttttgt
                                                                      840
                                                                      900
gccattacag gacaatcact gaatcatgtg ctctgtaatc aagatagtga tcttccagaa
ggagccactg tecetgeatt gggattatea aataaagetg tettteaggg agatataget
                                                                      960
tctcagcctt ctgatgaaga ggagctgtta actagtactg gttttgagta tcagcaggtg
                                                                     1020
geettteage cetecatact tactgageet eccaetgagg atcatettet geagaatact
                                                                     1080
                                                                     1140
ttgtggcctg aagttcaaaa actatatggg cacggttatg aaatattttg tgttacttgt
aacagttcaa agactctgct tgcctcagct tgtaaggcag ctaagaaaga gcatgcagct
                                                                     1200
                                                                     1260
atcattettt ggaacactae atettggaaa caggtgeaga atttagttit ecacagtttg
acagtcacgc agatggcctt ctcacctaat gagaagttct tactagctgt ttccagagat
                                                                     1320
                                                                     1380
cgaacctggt cattgtggaa aaagcaggat acaatctcac ctgagttcga gccagttttt
                                                                     1440
agtetttttg cetteaceaa caaaattaet tetgtgeaca gtagaattat ttggtettgt
gattggagtc ctgacagcaa gtatttcttc actgggagtc gagacaaaaa ggtggttgtc
                                                                     1500
                                                                     1560
tggggtgagt gcgactccac tgatgactgt attgagcaca acattggccc ctgctcctca
                                                                     1620
gtcctggacg tgggtggggc tgtgacagct gtcagcgtct gcccagtgct ccacccttct
caacgatacg tggttgcagt aggattggag tgtggaaaga tttgcttata tacctggaaa
                                                                     1680
aagactgatc aagttccaga aataaatgac tggacccact gtgtagaaac aagtcaaagc
                                                                     1740
caaagtcata cactggctat cagaaaatta tgctggaaga attgcagtgg aaaaactgaa
                                                                     1800
                                                                     1860
cagaaggaag cagaaggtgc tgagtggtta cactttgcaa gctgtggtga agatcacact
                                                                     1920
gtgaagatac acagagtcaa taaatgtgca ctgtaatgga cttaataact acatgcttgc
agtcactggt atcttaaaat attatcatgt aaacaggtca tctttacctt cataactgaa
                                                                     1980
ttgagtttct gggttttttt ttttttggaa agggagtttg gttttgccac accetecee
                                                                     2040
teccaggita aageaattit tittitteae eeteetgaga agegggaaet aaaggeeece
                                                                     2100
cccctgcccg ggttaatttt ggttttttaa gaaaaaacgg ggtttcaccg tgggccgggg
                                                                     2160
                                                                     2220
gggtttaaaa ctcctcgtct aagggaatcg gttggcctcg ccctcccaaa gggcgggaat
aacgggcggg accccctgcc cccaccctga gttctttttt ttaagcccaa agcgagagcc
                                                                     2280
                                                                     2299
cttatttcag ggctaaacg
```

```
<210> 4986
<211> 1094
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (969)...(718)
<223> similar to gi9451 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4986
 gaaaaccgga ggagcaattg gggatccagg tgtcagaggt aggggaacca ggggcaagct
                                                                         60
                                                                        120
 ggggctgagc tggaggtggg gatgagagca ggtgtgggga cagcaatacc cccttggggg
 teacetetet getteecece teeceagget teagtteett ecceetgade etgacteett
                                                                        180
                                                                        240
\ gaacgtcact gaaaacggca gctattgcaa ggagtggggg ccgcgggcag ccgctcttca
                                                                        300
 getegeggee caggggagtg gegaggggeg ceccaacece etgecegeet eteegeacaa
                                                                        360
 tacttgaaca ttcatctgta ctgaagtgtt acttgaaccg ggggaatctc ggacctgggg
                                                                        420
 gagccggggt gtgaggggac tggaccagct tggactgaga cctgagaccg ggccggtggg
                                                                        480
 egeceattig ggaetgegee acceeeagge tigtietigt titaetgtat igageggegg
```

```
caccegeegg accegeatta tggctggggg egecageeca agaatgggga ecatgggaet
                                                                      540
cctccagcct ggctcttccc actctttcat cgtcatggaa acttgtatcc catttgccca
                                                                      600
gggaactgcc actcctggtt gccatggaaa tagcagccaa cggacacctc ccgatgccag
                                                                      660
tgctaaggct ggaaatggcc ccctcttagt tgccatggga acctagtaac agactctgct
                                                                      720
ggccctcctt ccctgcccct tcctcgagcg cggggtgggg cttcgggacc ccggggatga
                                                                      780
geogggecag gtecegecee teegegeagg ecteeggggg ggeogggget taccatgtag
                                                                      840
gggagggag atctatccac atacctcagg taacagggag gtgcgcgggt ggggggaggg
                                                                      900
ctgggcggac caaaggccgg aggggtgggg cctggggata gcgagaggct tgagaatggg
                                                                      960
                                                                     1020
geegettggg ggagggaaga ggeageeegg egaggggeaa gegggggaee eageeggget
gggcccctgg gccccgggtc tgtacaatac ggtttgctat aaaactcaaa atcttccagc
                                                                     1080
cgggaaaaaa aaaa
                                                                     1094
```

```
<210> 4987
<211> 2632
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2309)...(1375)
<223> similar to gi2062609 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4987
ttttttttt ttaggtgtaa aaatacagct tttattctga gacattgacc ttcactagag
                                                                       60
tgggacctgt ggccccagcc tggctggaga agcagtccca gggcctgagt gacaccattt
                                                                      120
ccctttcctg aaataggaac aagttattcc aaaggagaaa ggagagccca gagagatctg
                                                                      180
tacaggacet etettgeaca tggtgactgg aggeagaggg tggggagetg gagaggagte
                                                                      240
cagtecetee aacaaatatt gagggettea aagagetett eetggaegtt tetettaate
                                                                      300
tggatttaaa agggacagga ggtatcttag ggtccaagaa cataacagga atgggcaact
                                                                      360
ctagaagtgt ttgtgtgtgg aaggeectaa eetggeeetg teeteeetgt etetacettt
                                                                      420
ggctttcatg aagagagatt cacagctcag aggaagggag gaatttctcc agtcttcact
                                                                      480
ttaacaaact cttttaagtt ttctgcctac cttatgttcc ctttggccaa tgacccactc
                                                                      540
cctgggaaca agatcttgtt gactttcttg ggaatctcct aagagataag tgctttgtgt
                                                                      600
cggagacaag ttcaggtaaa ccaaccaagg cagtgcctcc cacagtcaaa gagagaagct
                                                                      660
ggagggccaa agcctataga gttgggcact acagctgctc atgctgcaga ggagacagct
                                                                      720
agtcaggaac cctggagatt caagacaact tgctggtccc ctttgcccag ggctgtggtc
                                                                      .780
ctaatcacag teetteacet tteecagggt tageetgtgt tteaaatgea tatgatetge
                                                                      840
gctgagagga caacaggggg tcaggaacct ggggttctct ggggggcaga ctaagacgac
                                                                      900
teegggatee agaceettet geacetteag atgggagete eaggeageta aggggeegag
                                                                      960
gagaatgggc agagatcatg ctacaagggg aggttctggg gatgaggcag taatccccac
                                                                     1020
cctcagtaca ggtctgggtt cgccgaactc cttgagcctc agtcctttgg cggtcccggg
                                                                     1080
ctagggccac agcagcatca aaggaaagac tacccccatt cctccaagag gatcgagaag
                                                                     1140
ctcgggaccc ccaagccctt tctccaggag tcccatcaag ccggccaggc ctcgggcatg
                                                                     1200
gatttgcagg tgccacatga atcttgctac acattgcact gggcatcttg gcaaactgtg
                                                                     1260
gcttgggggg caccacaggc acagagcgga cctgttggac ctgaaccaga gtggaagcta
                                                                     1320
gacgcatgcc cacgccaccc aggccaagag aacaggggca tagacagccg tetggactgg
                                                                     1380
getgeeete aggeteeate teetetgget gaggtggetg tgggggetace tetteeatet
                                                                     1440
cagaagagtg aggattgccc tctttggcac agtcaacctc cagggacgct acacctgaac
                                                                     1500
cttcagagag ggtgtcctct tctaaatagt accctccagc cctctggtct ccctcagcct
                                                                     1560
```

```
ctccatcccc actctcccgt tccttgctga cctcccctgc tcctccttca gttgctgctt
                                                                     1620
ctgggcttct gctgtcttca ccatctcctt ggtcttttct tgcttcatgg taccccttct
                                                                     1680
coctetgtee titgteetea teetetetga eteeteage etettgttte tgtacaactt
                                                                     1740
                                                                     1800
cccatttctc ctcagcaact tgatcttcct gggccccttg ctctaggtcc cttccagctt
                                                                     1860
ctacctgggc ttcctctctt tgttcatcct cttctctctc aatttctttt tccttctcat
ctgtatactc atctcctcct ggttcctcca cacctttagc ctccatactg tcagccttct
                                                                     1920
                                                                     1980
tetgacettt ggaettetet teettggeet etgtetette eetacteeet teteteaate
tgacttttgt ctcttggctt cccccagcct cccctctatc ctcactggcc tttccagcct
                                                                     2040
                                                                     2100
ccaccttggt ctctggactt ccctctgcct cttccctgat gtctagcctg cctccaggct
                                                                     2160
cagcatgett gteeteecca actteecage atgeetgete tteeccaeec tgteecagag
                                                                     2220
cottgeettee acateetget geotegeect coagacteec tgaaccette cagattgggg
gtttaggtcc cagaagggga cttaggtcat cataggcact caggaaaact tcctccccat
                                                                     2280
                                                                     2340
tttcctcctc aacttcaggc ctggggccag cggagtccag ggaacagcag ctgggggcca
                                                                     2400
agacaaactg tgcctcatcc agagacaggt catccagggg tggctccaca gagaactcct
                                                                     2460
ccacctgagg cccaactccc aggagetect ccaggtagec cateccaggg tegteetece
                                                                     2520
caggggagaa ggctgctcct gctgcttctg cctgggccac ctccccatcc tctgccccca
                                                                     2580
cccactcagg ttctgagctg cttgagtcct ctaggaagga gaaggagtcc tgcacctcct
gggacagcga gtcctccagg gcaggagcca agtcgtctgg gcctgagtct gc
                                                                     2632
```

```
<210> 4988
<211> 997
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (837)...(122)
<223> similar to gi4176443 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4988
                                                                       60
gegeegggge tgaaggeetg gtetetgtet aggteeatat gggtteeagt tetggetttt
gttccgagac acccctccgc acatttgaaa tcaaagggtc agcaggaaaa gatctgaaat
                                                                      120
                                                                      180
gtgcagagac ttttgtgcct tcactacctc ttcttttgaa ctgtagcgga ccagagcatt
                                                                      240
teegtgaggg aggtteaggt ggaatgtgat cagegggeeg tgetgeatge acagagtgeg
                                                                      300
cagagttgag ccatcgatct gaggtgtaag gttttttaga acaagccaat ttgttattct
                                                                      360
ccctgagetg ctctcacccc agetggaacc tggggtatat ctggcgtcag aatttcccca.
                                                                      420
tectecacet atacgaaggg gagaattate ecacgtagae aagggtgget tetgaccagt
                                                                      480
cagtcccgga ggtgggcggg acggagcagt gatgttttta ggtggcaaag ggaccttcca
cageteatga gecagagagg tgtttgtaac tgaaccagga gaecatgtea atttggaate
                                                                      540
actatttctg gctgaagtgc tttgtgctgt actgctgagg ggaacgttgt agttggaggc
                                                                      600
acgaatggat gaccaggcac tagttgaagg cagcgtggtg ttcaaggatg aggatgaccc
                                                                      660
                                                                      720
actgttcctg tccctgaggt ggtcaacttc ccgcacagta ttaattgaaa gattgtttat
gacactgcca ggagtgacgt aagggtcagt ttcagggtca atgtttggat aacctttcca
                                                                      780
tggctcacca ggacgaaatt ttgcccaaga cttcatgctt aacttttcct caatcacttc
                                                                      840
tgcattcctt ctcatccgca cacgtcagtc taagcacgcc gatctgggct acatcagtag
                                                                      900
taagtccaga tgtaacaaaa ccatgtttgc tggagttttg atccaaagat gtgttcacag
                                                                      960
                                                                      997
aaatgctgtc cactgtcgtc cacttcctta gtcttga
```

```
<210> 4989
<211> 2249
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2250)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1833)...(1669)
<223> similar to gi4056411 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4989
gtagaggtgg ccccttctgt ccacacgcca tgaggtcgtt cccactctcc agcaacttga
                                                                       60
ccggtttagt aaaaaacgat gagctgaaaa accacatgca ataaacaaga aggagcagcc
                                                                      120
                                                                      180
aacaaaatct cttaaaatct cagaaatgtt caataaacat ttgcagagcg agaaaataaa
                                                                      240
taacatcgca aaggagccag tggctcctct tttccccgca tgttccttgg gtcaggggtg
catgtgtctc actagaagtc acatgtatta aaagcaggtg agttccagct ctctctacaa
                                                                      300
                                                                      360
ccccactggc ccccacccaa atgctcccaa cgggtccctg acaccctcgc tggtagctcc
                                                                      420
tgcctttgat aagctcctct agcctcaact gcttcttgat cctggctccc ttcccagaca
                                                                      480
ggctgcccag aaccctggtt catctgctca ctggagccgc tttgccagcc agccagagac
                                                                      540
cccctcccag ccatggccta aagagccaac agctgggaac ttgggctcat ccccagetgc
                                                                      600
gtctggtcgg cttggcggcc aactggaaaa cccagggcct ccatggcgct ctggacagag,
gaggeceega teccageece ggetgecage caatgecage etgtecaett gacagaaaaa
                                                                      660
cacacgetgg eegeetgeee cagggtgttt eeagaagaga aatttaatet aatttacata
                                                                      720
                                                                      780
cttctaggta catcgataac caaaatgtgg ccactgaaaa aagttaaaag gtcaatcagc
                                                                      840
tectggette tagetggece aggattgeaa aataaaaaga tecaegttee ttatteteta
cacaaaacgc gtttttaaaa aagtgaaagg tctagggagc tatacataga aagcaacagt
                                                                      900
gaaaagggag agggagcagg agtgggggag gagagtccca ccccccaacc ccaccctcca
                                                                      960
                                                                     1020
gggccccaga gcccctgagg ctctttgggg ggccttgaca tggcaggagg cagctgtcag
ctctgagctc ttcccagctg ggaaggcccc tctcgggggc agccaacaag gatttccgtg
                                                                     1080
                                                                     1140
gcattgtggg ctcagtgggg ggctcccagg ccccagcagg ccccacagag ggagcgtggc
                                                                     1200
ttcccctgag caagcaccgt ggcatgatgt ggtcgttcaa cccaggaact gggggtccgg
ggcaggtccc gggtctcacg aggtgcgtgt tgtgtgtgtt cgcatgtaca tgtgtgtgag
                                                                     1260
                                                                     1320
aggatattca tgggggagag agggaaccag aacaggggtc ttttggggtct ttgcaaatgg
                                                                     1380
ccacggatgg cagacatcgc cctgcctggc tgctagacgg gggagtgctg tcctcccctg
tgaccagacc ggctgccatc agagacctgg ctgctgcccc tgctggacca ggtgggcatg
                                                                     1440
                                                                     1500
qqctqaaqqa aqacacctq tggccccaga gtcctcgggc tgggggaagg gcagctagct
                                                                     1560
ggeteeegge geeetggetg tagtgtgeee ggeeeecaag gggegeeggt ttgaggtttt
                                                                     1620
ggcttgctcc tttggaaacg gaaagaaaga ggaagaggga cgaggacaca gaggaggaag
                                                                     1680
aagaggagac agaggtggca cgagagggga tctggaatgc ttttgtgtta gggagcctct
geogeogetg tetgtgeetg eggggeetgg gacteeteag gtggggggte egetttggag
                                                                     1740
aagttcatct ccaggatgtg ccgctgtaag tgccgcaccc actcttcctg gatggagagg
                                                                     1800
                                                                     1860
gggccctgga attccacctc acagaacctg catgggggaa cagagagagg gagtggccag
tgctgtgagg agaggcggaa gcatagcctt gccagcatcc ctgggcacac ctgctgctac
                                                                     1920
tcagtgtgga cagagccagc ccaggaggcg ggggaagagg gacccagaag tcaggcgttt
                                                                     1980
                                                                     2040
cccatggaca gccacctcca ctcaccatgg ggtcatggca gggtctcaca gagacccctg
```

```
cctctgtgctcagaagtcactggtgccaggtaagggctactggcttccaggtaccctgc2100catctggcagatacatagaatctgagacagtagagggcacagagaagcaaatcctaccaa2160acgcaccaagccccgctctcctgctcccgtcgacccggcaattccggnccggtggggc2220nggcggagactaatcaatgggttttcaat2249
```

```
<210> 4990
<211> 933
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(678)
<223> similar to gi2618752 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 4990 geggeegegg ettegeetae eecagegage teaaggeeca egaagtgaag catgagagtg 60 geogetgeca tgtetgegte gagtgeggee tggaettete caccetgace cageteaage 120 gecacetgge eteccaceag ggececacee tetaceagtg cetegagtgt gacaagteet 180 tecactaceg cagecagttg cagaaceaca tgeteaagea ceagaacgtg egaceetteg 240 tgtgcactga atgcggcatg gagttcagcc agattcacca cctcaagcag cactccttca 300 cccacaaggg cgtgaaggag ttcaagtgcg aggtgtgtgg ccgggagttc accctacagg 360 cgaacatgaa geggeacatg etgatecaca ceagegteeg geeetaceag tgecacatet 420 getteaagae etttgtaeag aageagaete teaagaeeea catgattgta caetegeeeg 480 tgaagccatt caaatgcaag gtgtgcggga agtccttcaa ccgcatgtac aacctgctgg 540 gecacatgea cetgeacgee ggeageaage cetteaagtg cecetactge tecageaagt 600 ttaatctcaa gggcaacctg agccggcaca tgaaggtcaa gcatggcgtc atggacatcg 660 gcctggacag ccaaggtggg tgggccaagc gcaatggaca gagcaggaat gataccaaca 720 tgacgcactc aggagectee tgeecagtta gaggagtggg gaggetggee aaggetgaga 780 cttcgttggg gtgggctcag gtctggaagg ggggtaccct ggaaggccat gatgacaata 840 acgatgggat atttatgtet tetteaaagg aettaaatga gateaegtaa acaatataat 900 aaaaatcata actaacattt attgagtgct aaa 933

```
<210> 4991
<211> 1935
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1198)
<223> similar to gi726403 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4991
                                                                       60
qaqqaqatca tcgccctctt catttccatc acgtttgtgc tggatgccgt caaaggcacg
                                                                      120
qttaaaatct totggaagta ctactatggg cattacttgg acgactatca cacaaaaagg
actteatece ttgteagect gteaggeete ggegeeagee teaacgeeag cetecacact
                                                                      180
                                                                      240
gccctcaatg ccagcttcct cgccagcccc acggagetge cctcggccac acactcagge
                                                                      300
caggegaceg cegtgeteag ceteeteate atgetgggea egetetgget gggetacace
                                                                      360
ctctaccaat tcaagaagag cccctacctg cacccctgcg tgcgagagat cctgtccgac
                                                                      420
tgegecetge ceategeggt getegeette teceteatea geteceatgg etteegggaa
ategagatga geaagtteeg etacaaceee agegagagee cetttgegat ggegeagate
                                                                      480
cagtegetgt ccetgaggge egteageggt gecatgggee teggetteet getgteeatg
                                                                      540
                                                                      600
ctettettea tegageagaa ettggtggee geettggtga atgeacegga gaacaggetg
                                                                      660
gtgaagggca ctgcctacca ctgggacctc ctgctcctcg ccatcatcaa cacagggctg
                                                                      720
tetetgtttg ggetgeettg gateeatgee geetaeeeee aeteeeeget geaegtgega
                                                                      780
gccctggcct tagtggagga gcgtgtggag aacggacaca tctatgacac gattgtgaac
                                                                      840
gtgaaggaga cgcggctgac ctcgctgggc gccagcgtcc tggtgggcct gtccctgttg
                                                                      900
etgetgeegg teeegettea gtggateeee aageeegtge tetatggeet etteetetae
ategegetea cetecetega tggcaaccag etegtecage gegtggeeet getgeteaag
                                                                      960
gagcagactg cgtacccccc gacacactac atccggaggg tgccccagag gaagatccac
                                                                     1020
tacttcacgg gcctgcaggt gcttcagctg ctgctgctgt gtgccttcgg catgagctcc
                                                                     1080
ctgccctaca tgaagatgat ctttcccctc atcatgatcg ccatgatccc catccgctat
                                                                     1140
atcotgotgo coogaatcat tgaagccaag tacttggatg tcatggacgo tgagcacagg
                                                                     1200
cettgactgg cagaccetge ccaegeecca ttegecagee etceaegtee teccaggetg
                                                                     1260
getetggage tgtgagggga ggtgtaggtg tgtgggtgae tgetetgtge tgegeettet
                                                                     1320
catggctgac tcaggcctgg ggcatctggg cattgtaggg gtgcagtggt atgtgcccac
                                                                     1380
coctotecca tratecttta getttaggee aagagegttg etcagggeag ettetgeeea
                                                                     1440
                                                                     1500
gggtgggtgg gactgagcag gatggatttt cttttgataa aagagtcgat gcctgaaaga
                                                                     1560
gaaaccattt ccttgattgt gtaaggaact tgctggacgc acattagaga ataaagctcc
tgtttctagg ctcctatgtg ccacctgtgt ccctgctact gccactccac ccccactctg
                                                                     1620
                                                                     1680
gggagggaa gccctccctg gggaagtgga atgcaaggga cagagtttgt ggagtgccac
ctgtggtctg tcacctccaa cgtcgcacag tgggtgctgg cccaacagtg aaacatggaa
                                                                     1740
gatccaggag gccttcgcat ggccatttct ccagggacct gcagggaaag cgttctggga
                                                                     1800
acagcatgtg caagggtccg gaggagcgag ggcttggggc cactgaggcg ctgtggctgg
                                                                     1860
tgaagagcag tggggcggga gggaccatcc gggtgacagc aaagggccct gtgccggacg
                                                                     1920
                                                                     1935
cgtgggtcga cacgg
```

```
<210> 4992
<211> 928
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (684)...(563)
<223> similar to gi3687497 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4992
taaaagtcag aactcattta aagaacttta agggatcctt tagaaacatt tttacttaat

```
ttcaaatgag tgggctgagc atgtagacta gcagcttttt atcaaacctg gcattgtcag
                                                                      120
                                                                      180
gttgaactta taaatacgaa taattactac tctgacttgt aaatgtagct gctaaagtat
gaggtatatt taagaagaat agattagttt cattatacct ataagaacaa gaattcaaaa
                                                                      240
                                                                      300
qtqaqqtaqt catccaggtt ccccctccca caatattttt gtatcataaa atttagatga
                                                                      360
cttttttqqq ttacattttt atccatatat tttgaactaa cagaacttgg cagaatgtgt
gttgaatatt ctttacattt aacaattaaa aacaactaaa actgaatagc aaatagttta
                                                                      420
                                                                      480
ttggtäagta cacggtttca acgggagtaa taaattcaca tgaaaaggag acaataatca
                                                                      540
agtcaaaaga ataaatgctt actaatcatc agaaaatctg tggccattag ggctggcacg
                                                                      600
taaaaatcca aaatcactca gaggccaaat cttaaagaag attcgtcctc ttattagtcc
                                                                      660
atatggaata ggtccatagc acctggaatc tgtagaattc tgtagattgt caccttctaa
                                                                      720
ccaaacatga cccattggca cctagaatta gagaagaaat gcagcctctt aaagataaaa
                                                                      780
cctaatttgg gtactataat taaaaagcat gtcattcaga ggtagggaga aatgtcctaa
                                                                      840
ggctctcttt tatagaatag atacaaatcc taatattgca tttttgcttt tatttcttgc
                                                                      900
acaataactt ttactaaata tcaaaggttt caactttttt aaaaacctat catcttttt
                                                                      928
tgtccgaacg cgtgggcgga cgcgtggg
```

```
<210> 4993
<211> 3675
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3676)...(1630)
<223> similar to gi2072501 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 4993
tttctctgcc tttctatctt ctttactatg aattctgaat aaaatggaga acacactctc
                                                                       60
aatatgtaga aaaataaaat tttggcaaaa caataattac tgtttttctg tatgtactta
                                                                      120
gcagtgaaat atttataggc aacagatttt aagaagtcag ttccatggct attaaaaaaat
                                                                      180
gtttaagtta atgaaattta cagtgcatat taaaagcatg atacaaatgg aaatttaaaa
                                                                      240
ttttgtatta ggaagcccag cttgctaaaa gtagcattaa tatcattcac atcagatttt
                                                                      300
aatttgttac acatttttgt agttcagcaa aggcccctat gatgaaaaac aattaaaaag
                                                                      360
tgttatgaca aaaataatta tctcgtgtaa aaagggggag acccaaaaga tttttcatat
                                                                      420
                                                                      480
ggttatttaa ttcagttaaa tagaactgtt atgaatttga gaggaatgaa gatattcaaa
cactaacaga aaatcattag ccttatatta gagcattcaa atgcttatgt aactcttcaa
                                                                      540
tccatccggg cttccataaa aaccaaaatt ttgaacacaa aaaagtggca gagtttacat
                                                                      600
taccttttgt atgttcctaa gtatgaaatt gcatcaattt attatgaatt aaatttgaaa
                                                                      660
agcatcacag atttaaaaac aaagtacaaa agaagettga ttetttttaa ttecacaaat
                                                                      720
acctagcate teaaagtaae atgtaaaeaa aettetatge tgeteaatga ateetteeaa
                                                                      780
tttcgataat aaactaaata gtattggatt tagtatatga ctttcatggg taagttatgg
                                                                      840
ttctatccat tactttaaca atattactga tgtaacagag aaaaattttc cactattgta
                                                                      900
tttatttaaa acaaactgac aagttcaagc acctgttttc agaaaagccc agcagcattt
                                                                      960
ttttttttt aacatactca aagtaagatt tggcctaagc ccttaatacc tttctgaaca
                                                                     1020
gccatgcaac taaacaccct caggagatgt tacataaggg agagaagaac atggagcaat
                                                                     1080
ttgcactttt tcccctagat aatattaaca aggtaaagca aatccagatc tttatgaatg
                                                                     1140
aatggctgtc atgtttaata cacttggagc tctataaaac tagagccact atcatatatg
                                                                     1200
tttatataga tatatatgta tttttaataa agtctctcac ttgcttcaaa atttaaggat
                                                                     1260
gatettttte etggteagte attteaaggg aacaataaat aaagtagaaa aggatgaact
                                                                     1320
```

```
gttttgcata tttctgtgga agaacggaaa acatactttg agaggttcgg aaaattcact
gtacagaatg aacagcttat atacactatc tgtgcaattt ttcttggctg gggtatttaa
                                                                     1440
atgcaagage tectecaaaa taagaageea catteattet tgtecaaate cetetgtete
                                                                     1500
ttctattgca aaaagaagtt tttcctttag ttgttcataa ctcttatatg gtggtagatc
                                                                     1560
caagegatta aaacatgtat ggettettgg taaccaagtg tetttgecaa ettttteaat
                                                                     1620
gcaaaacttt tgaggcccat tacttcccat gagctcagca aatcctccta gaggtaaacg
                                                                     1680
graggities gigargaact graataging catterfact traiting totatificat
                                                                     1740
aaactgccaa aaccaaatga tttgcttgct gtttcttgta taatgtcgat aaacagtatt
                                                                     1800
tetetgecaa tetgecaagt caaceteetg catgecacae aacataacet etaattettt
                                                                     1860
                                                                     1920
ttcatcgaag tactgtagcc actgaagagg aacaacttca ttaaaaccat caaqqaaaqc
tttggtctgt tcttgtactc ctcgagaaaa acgccattct gtcattaaac caatatattc
                                                                     1980
atctttgttc tcctcagtca ccagaatatt ggaacctccc aacttcaggt catgtgaagt
                                                                     2040
aacttttccc aaaatctcca tgtcaacaga aaagtacatt tctaagccac attcttcaat
gttgttatct cttatccaga taagggagtt ataaaattca gtatcaatag attccaaatc
                                                                     2160
cttaatagta agttttttac ttaacatacg cttgtagaat ggtaaagaga aaccagtatc
                                                                     2220
gataaacttt ccatgaaata gtgccatggc aataaaacga ccaatgaaac agaagtatga
                                                                     2280
aagatggtct ggattaatgg ttgatgctgg atttatctgc agacaatagt tgttcttgcc
                                                                     2340
cgcatactca aataagcaat acattgggtt caaaacttca tgtgaaagca agaaaaacca
                                                                     2400
tteteteget aggecaccat aatcaagtee ttetteteet etaaatatta catataageg
                                                                     2460
cctcctcaag tcatagggtt ttaatgccat aatctgttgg aaggaatctt caaacaatgt
                                                                     2520
ctgccgggac acattgatct ttacatgact aggtagtgca ttagactggc acaaataacg
                                                                     2580
gaagtgagca agettecace taaageegeg tteataagea atttgtggae cacetttagt
                                                                     2640
tacagatgac ttcccattgc gaggatettt gaatgttgtt gttcttgtgt tatgatcaac
                                                                     2700
aaagtacett acacetteae gagtatatet aattteeeag cettetggea ggggttette
                                                                     2760
attetgtaag cettgagtte ttggatette ceactgggtt gtttttgtgt tatgatteae
                                                                     2820
aaagtaaacc ctgtctgttg aatccactct tttttcccag cctggtggca aaggtccata
                                                                     2880
agggtcattt tctgcagcta acattgaagc cgaatagagg tatcgttggt taaactgttg
                                                                     2940
catagetece tgeaattggt teegetgaga ttgecaetgt teaaaattte ggacagatte
                                                                     3.000
catggtaggc cgctgccacg ttgttgttct ggtgttatga tccacataat aaactcttct
                                                                     3060
acgatcatca actottottt cocaacctgg aggtaaaggt tgtggtotot cocatgtggt
                                                                     3120
agttogagta ttatgatoca cataataggt totaccatga ggatottito tttgttocca
                                                                     3180
ccctgatggc aaggtttctg tgttggcatt cccagactgc tgccgtacag gatccataca
                                                                     3240
cccatctggc tgtcttgatt tggctgcttc aaaagcagaa ctacttctag aattagaggt
                                                                     3300
gtcaggetet aatatactte tagetteaga ttecaattet geaetggtag aaggaataca
                                                                     3360
ttcattgttt tctgaggaag tcagtatttc ttgaactgga ggatcttcaa cagtagtact
                                                                     3420
agtgcaattt ggagacaagg cattttette agacactaet ggagtaeeeg tgaeagaege
                                                                     3480
attatcagtt ggtgcaaatg aggatgattc tccattaaca gtgtcatcgg caggctcaga
                                                                     3540
tgcgagtggt tttggagctg gtgtattttt gggtctggca gcaacctgag acggagatga
                                                                     3600
aggtgtgttg tetecattaa etacatacga geageatgag ttttggaeta gagtgettgt
                                                                     3660
aggtacatga ttagt
                                                                     3675
```

```
<210> 4994
<211> 2633
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2634)...(325)
<223> similar to gi55819 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 4994 ttttttttt ttaaaattat gtaatcattt atttataaaa taacaaaaat ttatgaatag 60 atctgtttat tgtactgtga aaagggtctt ggtacatgaa acattatata ctttgaggac 120 agcattcaga actgttaaga caaaagacaa actataattt taaactcaat cttgatttaa 180 gggaaaggct ataaattatt ggctgaaaag tattcagcat gaactcagat tctatataag 240 catgaaagag tacaaaagat gttggagtcc agtaagccca tacctaaatt aactgtaaag 300 etteaaggae tttttgttta tttttatata etagttttet tetgtgaeaa gttgatttta 360 tctccaagac ttaaggccat tccctggctc tttgcacgaa ttcttatatg gccggtaaca 420 gcagcatctg gtccctggtg aattggcttc tcaatgctga catttgcaaq tqcatcttca 480 ccaaatatgg aacgagcata aaggttggct gccataaagc cacagtaacc agaaagggcc 540 ttttctggag tcaggcattt catattggtt gactttaata tgtgctgtaa gtagtcattt 600 aaatcaacca tgttggtgtt aactgtcact ttgttttccc attcaaattc ggcccacatc 660 tgacggaatt ctgcatcagt gcaagttgca ggctggatat agtccatgat gtcgatgtga 720 atatcactga gaaccacaca atttctgtca cttgctgctc cagagacatc ataaactata 780 ttaccaaaaa ttattccatt ttctgttgat gctactttga cgttagcttt aatatttgcg 840 aagtcatgag gagcaagagt caaaggagac ggcttttcca caagtttcag atcccctagt 900 gtagctagtt ctaatgtgca attctgcaaa gtatcactgg tttggttcac aacaagtaca 960 tccaggacaa tatcatattg gttgacatga acgtaagctt ctgcatatac aggatctgag 1020 aaacctgtca attgggtgac cttgttaagt ttagatgcta ggggatctgc tqcctctttc 1080 ctctgtgtgt tacccattgc tgccagtaaa ctcagctgaa actgatcttc cttgcagttc 1140 atttcattct tagcagttag ttgcatgaag gaaatggggt catcaggctg tactqtcaca 1200 tteetetttt eagattettt ettttgggat aatttetett ettetagttt ageagataae 1260 atgtgagaaa gggactgtct gcattcctta ttgaaaatgt cattcattaa aggtgaacat 1320 tcagacaaga ccttgaggca cagggaaatt cgatccacat catcatcagt aattggcttc 1380 ttaggaagag aggattttcc caaatgcagg atagtagcca tgagcaacat agcctcagca acaaaagaat tttgcttttt cttctcctga accaaagcta catagcgcaa tgcaatcttg 1500 gtcagagttg tggcaaggga ggcagcaaca aagaaatctc catccagaag gaatcctctc 1560 aagggaggtc tgtcttcctc tttcttggtg ggtctagaac tgctaagggc actctgagtt 1620 gcataggtac ccatttcagt aaccaatttc tgaactggcc ctacagttat ttcttcttca 1680 ggttttaatt caccagcttc tttctttatt tctgactcta caattgggat ctctccaagg 1740 gacctgcgga tctcagtcat cacactctga atgtcttcct tggtactaca gtattctccc 1800 aggatecata atgeteeteg gtaaatettg acagatttaa tagcatgaaa gaetteaage 1860 atcttctcaa caataagcat tctcaggtta tcaaagcgct gaatggcttc acgaacaaac 1920 tecaagacat cageagetge tgettegttg ttgteactga gaaattecat taacacagga 1980 ataacatttg cagccatatc tggaaatcgg acagaacagg aatgcaatgt tcgcactagg 2040 agttgtctgt atttgtcagt atcttcatgc tcagacacat tatttgtttt tatcacttcc 2100 ttcttcagga caataaccag ctcttcaaca tttctagaag agacaagatc cagtgctaac 2160 tgcagagttt tctttcgtac ttctaagtct ggtgtgctca atactcttag gatatccata 2220 accagatect gtagtacteg tteatgagea ggatgetett ttaattetat caaqeqatee 2280 aaaactatga gttttacatt gttgtcgctc tccttaataa ttaaatcaat gtaacactga 2340 gcagcagcct tgattgcagt tggtgcacta gagagtgtca ctaatgtccc agcagcttca 2400 tattttacag cagggetgga tgactgtaat aagttataga tgcagegaat aaaacgaget 2460 ctttctgatg gattagcatg acagccctta taaatcagtt caacaataac cagctgcaga 2520 atgtetecaa atgtttgaae ttgateaatg caagtaetta agtaatecaa agetegatee 2580 tgatctgcat gaattagcat cataaatgca ttccttttgc aacttgcatc ctt 2633

<sup>&</sup>lt;210> 4995

<sup>&</sup>lt;211> 2756

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
<221> misc_feature
<222> (2734)...(1931)
<223> similar to gill30494 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 4995

```
tttttttttt ttcatgttcc cgtatgcttt attggaatgc tgtcaggtcc gcgccttcca
                                                                      60
cctgggccct cacacacage aaggagagge cccagcaccg gtcccaggec cacctgcccg
                                                                     120
cacctgcaga agggaaaggc catcaccctc cgtggacggg gtctcggcca ccacatccac
                                                                     180
ettetgaagg tggeecagae aceteeaege tgetgaetge actteecate aaaagggaet
                                                                     240
ccctggggca gagtgggccg tccccctacc cccgaggaag gcaccctcct gggcggggac
                                                                     300
agacettgge tecatgetge caagteaagg tgetggegtg gaaacaggea catgtggaae
                                                                     360
accacatece actgtecaag gtggagteca eceetecteg gageacteag eceaecaggg
                                                                     420
tecaageage cetegggaga taceaegegg cegeceaegt eteagettgg agaaagacae
                                                                     480
540
tttcccggtg gcttctcagc accttgagcc tctgatgccc cgcctctgac ctcaggtcca
                                                                     600
actacageag gtggctgctt cggtgateaa atccctccgt ggcagccaag gacaccggcc
                                                                     660
ctccacacca gctaccaaga gggctggtgc ccacagggag gaccgggcgc caggagggct
                                                                     720
cgctgaaatc tcggtcccat cctgttctgc aagtggctga gtccctaggg tgggacgagc
                                                                     780
acaggggetg aagggeeeag getgeteeag gagtgetgea gaeggegaee gggaagtggg
                                                                     840
gtgaccaggg agcatggcca aggccagagt gatgagcatg gtggcaggga ggagagcacc
                                                                     900
teaegtacaa actgeaegag ettegggege atgeatgget ggeeaagaet gagggteaea
                                                                     960
cagggcagac aagggagacg agtcacacgt ggcagcacat catccagtcc tcggggaggt
                                                                    1020
gagggttggc atgtggcggg caccggtgtg cagggcagcc ccatcctggg gctggagctt
                                                                    1080
dectagacce aggeaceacg cacaggeate ecetgeteag etcetgaace eggeecetee
                                                                    1140
tgcctggcca cgtccgctat cgcaccctcc tgcatcaggg ccgagggccc accctgcgct
                                                                    1200
cetttttett ccagggtgtt ccaggatggt caagttecag cactgagaac agetcaggtg
                                                                    1260
tgggtgtggc tattgtggag gccgtgtctg gtgaacctgg tgaacttggt ggtgggacgg
                                                                    1320
tgctgatgca ggggagccac agagggttac gaccgacgcg ggtctgacag cacaggccca
                                                                    1380
ggcaggcgtg gactcgggag ccgagggtgg tcggatggca gcgtgagcgc cagtatcatt
                                                                    1440
tecageatit ceatetttae caetecagte actetettea aaaagaaaga aetagageaa
                                                                    1500
aaccaaagtt aaatatetea aegagaaggg acaceteaeg tegetgaeag eteggeaegt
                                                                    1560
ggctggtccc aggccccaga gatactgcgt agtgaactgg ccgctggaac gcagtcacag
                                                                    1620
gestetgtgs tgsagessas etsesageaa gesasgeaga gesseggest tgagtssaag
                                                                    1680
aatgcccagg ggagtgtggg acgggacggc ccccacacag gctggacagc aagccgcccc
                                                                    1740
cacgcaccga agactececa egegeaggeg gegeacacce gggtetecet agggteetge
                                                                    1800
etcccgagae getgteetea eactgeagtt getgattett gggteaaatg gaaggaggag
                                                                    1860
gaacgacgag ggcagagtgc aaacacgaag tegeeegggg gegetgggga egggggegea
                                                                    1920
gtgggcccta ccagttctgg ttgtcccagc catcatcagt gggcacggcc ggcggcactg
                                                                    1980
cettettggt geceteceeg ceeteceege egtegetgtt getgtteetg ttggtggagg
                                                                    2040
eegageeeca caceteecag etgteegage tecteetete ggtggaggtg teegegeacg
                                                                    2100
tccagctgtc gctgctcggg gacttgcggg tcttggtggg ctcagcactt ccaaaggtct
                                                                    2160
eccagaaget etggtetatg ttgetgtttt ggaagtggte cagacegetg ttetgataae
                                                                    2220
tgtggccctc cgaggggctg tccaaggggc cctctgcttt ccccgaaaaa aaggtggtga
                                                                    2280
egtecegeca tecettaeta eegaeteeet ggaeettgga egecaaetga gagaeeecae
                                                                    2340
tggagacate ateaaaaate ttteeeteet teacettete etgegeagge ttgaggaegt
                                                                    2400
tetegtteag getgtggeee ageteggaeg cettetgaet egettgggat ceaaaetttg
                                                                   2460
tagegeeete ettggetgee gaggeaaace ggetggetee agtggtgaag etgeteeage
                                                                   2520
ccgagtacag ggaggacatg gcgttgttga ggaagtcatc ttctttcttc tgaggcggtg
                                                                    2580
gcgtgttccc aaaccccacg tagcgattcc cctgggcccc ttgataggag ccgaggtcat
                                                                   2640
cattcageca gtettcaaaa geettgteeg aggaggeggt cacaetetge ggetggeeag
                                                                   2700
agacteggtg caccatgaaa ggcagegtee tgeecaegeg teegeecaeg egteeg
                                                                   2756
```

```
<210> 4996
<211> 1380
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1098)

<223> similar to gi3098418 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 4996
acaagatgog agocatootg ogoatagaag tggaggoogt goggtttota aagagggago
                                                                       60
cacacaaget ggacagtete ttgaagegtg tgegeageat gacagaegte etgaceatge
                                                                      120
tgcggagaca tgtcactgat gggctcctga aaggcacgga cgcagcccaa gccgcacagt
                                                                      180
acatggetat ggaaaaggee acageegeag aagteetgaa gagteaggag gaggeageee
                                                                      240
acacctccgg ccagcccttc cacagcacag gtgcccctgg cgatgcgaag tcggaagtgg
                                                                      300
tgcctttgtc cggcatgatg gttcgccacg cgcagagetc ccctgtggtc atccagecct
                                                                      360
eccageacte egtggeeetg etgaaceetg etcagaactt geetcaegtg gecageteee
                                                                      420
cagccgtccc ccaggaagca acctccactc tgcagatgtc gcaggctccg cagtccccac
                                                                      480
agatacceat gaatgggtet gecatgeaga gettgtteat tgaagaaate cacagtgtga
                                                                      540
gtgccaagaa cagggcagtg tctatcgaga aagcagaaaa gaaatgggag gaaaaaaggc
                                                                      600
aaaatetgga teaetataat gggaaagagt ttgagaaget eetagaagaa geteaggeea
                                                                      660
atatcatgaa gtcaatacca aatctggaga tgccgccagc cacaggccca ctgccaaggg
                                                                      720
gagatgcccc agtggacaag gtggaacttt cagaagattc tccaaattcg gaacaggact
                                                                      780
tggaaaaget ggggggaaag tegeceete etecteegee aceteetegt egaagetace
                                                                      840
tgccaggate gggactcace accaegaggt caggegatgt ggtetacace ggcagaaagg
                                                                      900
agaacatcac cgctaaggca agcagtgaag atgctggacc aagcccacag accagagcta
                                                                      960
caaaatatee ageagaggag cetgetteag cetggaceee atececaceg cetgteacea
                                                                     1020
cctcctcctc aaaggatgag gaggaagaag aagaagaagg agacaaaata atggcagaac
                                                                     1080
tecaggtatg tggatgaggt gactgacatt ggeteettge etecegeetg ggteteteca
                                                                     1140
gccatggcac tcacagattt gttagcgaga aggccaggga agcgcatgga ccgggaccat
                                                                     1200
agaagetgtg tettetggee ttageetttg ettteceaag atggegetga acaaqqetet
                                                                     1260
caggatgcct ataagatgtg caaggaatga ccatttcaca aaacaactca cgctttccta
                                                                     1320
cetetggetg taaaattgae ttteetttet tteeatetta agagattetg etteatttea
                                                                     1380
```

```
<210> 4997
<211> 1549
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (114)...(1114)
<223> similar to gi5091611 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 4997
                                                                       60
cgacgatttc gtggcggttc aggcgccaga gctggccgat cggcgttggc cgccgacatg
acgcccgagg acccagagga aacccagccg cttctggggc ctcctggcgg caggtctaca
                                                                      120
                                                                      180
tetecgaaat egectaceea geagteeggg ggttgetegg eteetgtgtg cagetaatgg
tegtegtegg catectectg geetacetgg caggetgggt getggagtgg egetggetgg
                                                                      240
ctgtgctggg ctgcgtgccc ccctccctca tgctgcttct catgtgcttc atgcccgaga
                                                                      300
                                                                      360
eccegegett cetgetgaet cageacagge gecaggagge catggeegee etgeggttee
tgtggggctc cgagcagggc tgggaagacc cccccatcgg ggctgagcag agctttcacc
                                                                      420
                                                                      480
tggccctgct gcggcagccc ggcatctaca agcccttcat catcggcgtc tccctgatgg
                                                                      540
ccttccagca gctgtcgggg gtcaacgccg tcatgttcta tgcagagacc atctttgaag
aggecaagtt caaggacage ageetggeet eggtegtegt gggtgteate caggtgetgt
                                                                      600
tcacagctgt ggcggctctc atcatggaca gagcagggcg gaggctgctc ctggtcttgt
                                                                      660
caggtgtggt catggtgttc agcacgagtg ccttcggcgc ctacttcaag ctgacccagg
                                                                      720
gtggccctgg caactcctcg cacgtggcca tctcggcgcc tgtctctgca cagcctgttg
                                                                      780
atgccagcgt ggggctggcc tggctggccg tgggcagcat gtgcctcttc atcgccggct
                                                                      840
ttgeggtggg etgggggeee ateceetgge teeteatgte agagatette cetetgeatg
                                                                      900
teaagggegt ggegacagge atetgegtee teaceaactg geteatggee tttetegtga
                                                                      960
ccaaggagtt cagcagecte atggaggtee teaggeeeta tggageette tggettgeet
                                                                     1020
cegetttetg catctteagt gteettttea etttgttetg tgteeetgaa actaaaggaa
                                                                     1080
agactetgga acaaatcaca geceattttg aggggegatg acagecacte actaggggat
                                                                     1140
                                                                     1200
ggagcaagcc tgtgactcca agctgggccc aagcccagag cccctgcctg ccccagggga
gecagaatee ageceetigg ageetiggte tgeagggtee etecticetg teatgeteec
                                                                     1260
tccagcccat gacccggggc taggaggctc actgcctcct gttccagctc ctgctgctgc
                                                                     1320
tctgaggact caggaacacc ttcgagcttt gcagacctgc ggtcagccct ccatgcgcaa
                                                                     1380
gactaaagca gcggaagagg aggtgggcct ctaggatctt tgtcttctgg ctggaggtgc
                                                                     1440
ttttggaggt tgggtgctgg gcattcagtc gctcctctca cgcggctgcc ttatcgggaa
                                                                     1500
ggaaatttgt ttgccaaata aagactgaca cagaaaatca aaaaaaaaa
                                                                     1549
```

```
<210> 4998
<211> 2938
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(947)
<223> similar to gi5912247 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
    <400> 4998
    acgcgtccgc cggagcggc catggacgcg ctcaagtcgg cggggcggc gctgatccgg
    agccccagct tggccaagca gagctgggg ggcggtggc ggcaccgcaa gctgcctgag
    aactggacag acacgcgga gacgctgctg gaggggatgc tgttcagcct caagtacctg
    ggcatgacgc tagtggagca gcccaagggt gaggagctgt cggccgccgc catcaagagg
    atcgtggcta cagctaaggc cagtgggaag aagctgcaga aggtgactct gaaggtgtcg
    ccacggggaa ttatcctgac agacacctc accaaccagc tcattgagaa cgtgtccata
```

```
420
tacaggatet cetattgeac agcagacaag atgeacgaca aggtgtttge atacategec
cagagecage acaaccagag cetegagtge caegeettee tetgeaceaa geggaagatg
                                                                     480
                                                                     540
gcacaggetg ttaccetcae egtageccag geetteaaag tegeetttga gttttggeag
                                                                     600
ggggcccgcc aagactgcac ccccccttg aagagcttgg tcgccactgg gaacctgctg
                                                                     660
gacttagagg agacggctaa ggccccgctg tccacggtca gcgccaacac caccaacatg
                                                                     720
gacgaggtgc cgcggccaca agccttgagt ggcagcagtg ttgtctggga gctggatgat
                                                                     780
ggeetggatg aagegtttte gaggettgee eagtetegga caaaceetea ggteetggae
                                                                     840,
actggcctga cagcccagga catgcattac gcccagtgcc tctcgcctgt cgactggač
                                                                     900
                                                                     960
aageetgaea geageggeae agageaggat gaeetettea gettetgagg geeeggggee
agccggacac aagcggccct gacacgtgat ggaccaaagc cacctgctgc gggggagcca
                                                                    1020
gttctggggc ccgcctgcca cctctcccag ccctcagcat tgtcagcctg aagatcagag
                                                                    1080
ctgcagccag tcaggcaggg gagagatttt tcttttaagc cctgctcttt ctctgagaac
                                                                    1140
caaaagatgc cttgaatatt tattcagtga cttctggctt atgctcagaa gccagtctgc
                                                                    1200
gtcaggcacg tetcetgetg egtgacatgt geagtgetgt aateggetee egettgetet
                                                                    1260
cctggagcaa gctctgccct ggctgtgggt atcaggactg tgaccaaagc atttctagtc
                                                                    1320
cettetetet ttetaaggae ceaaatttee etgggggeat cetgetteet gaaagetgtt
                                                                    1380
ggatttcagt gatttttccc cccaccccc agcacaggag agcacccaca gccgcagaag
                                                                    1440
gggaatgtgt detectgete tgetteetea gggeeecage aggeggggg tttgageect
                                                                    1500
gggaccccag gcttctctag agacttaagg gggcagctcc tgaaccaaag acgatacagc
                                                                    1560
ttggcacttt aaagcattaa cagcaggtgt gaccctgagg gctcctccat ggtgctgcat
                                                                    1620
tgagtccage tttccttctg cccttcctcc aggagaaggg gcccaaggtc cccgtggatg
                                                                    1680
gtetecacet gtgettggaa ecagtgtaae tggetgetee etgeteccag ggaetgacae
                                                                    1740
ggggatcate tetgtgaceg coeteegteg ggeocetgee tgeettetee ceteeaegea
                                                                    1800
aggetgtget etteetetgg tttetgtgtg teegtttgag tgtetgegee eegeeteeee
                                                                    1860
atacttectg ggatgatgtg tgaaacetga cacetagatt tatttggaaa tattetatga
                                                                    1920
ccactttaca gatgaggaaa ctgaggcctc aagcgtggag gggtagagtg aagagtagaa
                                                                    1980
cccaggtetg atgccaaage tgetttette tetgeeteet eetcaegeaa etcacacete
                                                                    2040
cttttcttct agctttgttg tcctcccagg aaccaaaaaa ccccagctat tttctgacca
                                                                    2100
aaatgtgttt cataacaaac catctggtgc ctttccacac agaactggca ggagcctcgt
                                                                    2160
gtoctgotag ctgtctctct tgttgatttc cgtgaaaatg caagtgtttg aagtctgctc
                                                                    2220
attocgaggg tgaaacaaaa tocaaccotg toagaatcat gotgttotot ttgotgacac
                                                                    2280
tgtgaccctg ggtcgggaca gaccagcagc aatctgtctt tagaatctct ttccttcctc
                                                                    2340
cccttttgcc cccgtggggc tcccggcatc ctgaaagcca gcaaagcctc cagcatcttt
                                                                    2400
tecateetga ggtgeeteec agtggeetgg ettgteggag caagttteat cageectagg
                                                                    2460
gaaaacacgg cccctcctgg gaacctcctt acctggagta accggacacc ttagacggag
                                                                    2520
gtgcctgagg gtggggtggg atttgcaggg tcattatcag aacatgagga taacttcctt
                                                                    2580
geceetgete tgtagecace teettggeac eggéététat ttgtcataag geggegtggg
                                                                    2640
cgaggcctga cacaggccag ccttggcacg agggggcca ggggttctga gaagcgctgc
                                                                    2700
cetgtgagag ceaegtgaga geeatgetgg cettegtete catetetggt tgaegggetg
                                                                    2760
tecgtgtgcc teetgtgtgt etgeagaeae acaggageea egetggeett egteteeate
                                                                    2820
tetggttgac gggetgteeg tgtgceteet gtgtgtetge agacaagtet tgetgtgett
                                                                    2880
tatttgtgaa actttaatga ggaaaaaaca aataataaat gttctcgttt tgaaactc
                                                                    2938
```

```
<210> 4999
<211> 2910
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(2858)
<223> similar to gi2564330 in the genepept database release 114,
```

```
<400> 4999
 gcagtatctg ggagagacgc agttcgcacc gggccagtgg gctggcgtgg tgctggacga
                                                                        60
 cccggtgggc aagaatgatg gcgcggtggg cggcgttgcgc tacttcgagt gcccggccct
                                                                       120
 ccagggtatc ttcacgcggc cctccaagct gacccggcag cccacggccg agggctcggg
                                                                       180
 gagtgatgcc cactecgtgg agtegetgac tgcccagaac ctgtcattgc attcgggcac
                                                                       240
 ggccacgccc ccgctgacca gccgcgtcat ccccctgcgg gagagcgtcc tcaacagctc
                                                                       300
 cgtgaagact ggcaacgagt cgggatccaa cctctcagac agcggctctg tgaagcgggg
                                                                       360
 cgaaaaggac ctgcgcctgg gggaccgcgt gctggttggc gggacgaaga ctggcgtggt
                                                                       420
 gcggtacgtg ggggagacag actttgccaa gggcgagtgg tgtggcgtgg agctggacga
                                                                       480
 gccccttggg aaaaatgatg gggcggtggc gggcaccagg tacttccagt gcccacccaa
                                                                       540
 gtttggtctc ttcgcgccca tccacaaagt gatccgtatc ggcttcccat ctaccagccc
                                                                       600
 agccaaggcc aagaagacca agcgtatggc catgggtgtg tcagcactga cccacagtcc
                                                                       660
 cagcagttee tecateaget cegteagete tgtggeetee teegtggggg gteggeecag
                                                                       720
 cegeagtgge etgeteaegg agacetette aegetaegee egeaagatet egggeaecae
                                                                       780
 ggccttgcag gaggcactga aggagaagca gcagcacatt gagcagctgc tggctgaacg
                                                                       840
 agacctggaa cgggctgagg tggccaaggc cacaagccac atctgcgagg tggagaagga
                                                                       900
 gattgccctg ctcaaggcac agcatgagca gtatgttgca gaagccgagg agaagctgca
                                                                       960
 gegageeegg etgetegtgg agagegtgeg gaaagagaag gtggacetgt eeaaceaget
                                                                      1020
 ggaggaggag aggaggaagg tggaggatct gcagttccgc gtggaggagg agtccatcac
                                                                      1080
 caagggagac ctggagaccc agacgcagct ggagcacgcg cgcattgggg agctggaaca
                                                                      1140
 gagectgeta etggagaagg egeaggeega geggetgete egagaattag eggacaacag
                                                                      1200
 getgaceaea gtggeegaga agtegegegt getgeagetg gaggaggage teaceetgeg
                                                                      1260
 ccgaggtgaa atcgaggagc tccagcagtg cctgttgcac tcgggtcccc cacctccgga
                                                                      1320
 ccacccagac gccgccgaga tcctgcggct acgggagcgg ctgctctcgg ccagcaagga
                                                                      1380
 acaccagagg gagagtgggg tgctgcggga taaatacgag aaggccctga aggcctacca
                                                                      1440
 ggcggaggtg gacaagctcc gcgcggccaa cgagaagtac gcacaggagg tggcgggcct
                                                                      1500
 gaaggacaag gttcagcagg ccaccagcga gaacatgggg ctaatggaca actggaaatc
                                                                      1560
 caagetggac tegetggeet eggaceacea gaagteeetg gaggacetea aageeaceet
                                                                      1620
 gaactcgggc ccaggcgccc agcagaagga gatcggcgag ctgaaggcag tgatggaggg
                                                                      1680
 catcaagatg gagcaccagc tggagctggg taacttgcag gccaagcatg acctggagac
                                                                      1740
cgccatgcac gtgaaggaga aggaggccct gcgagagaag ctgcaggagg cccaggagga
                                                                      1800
 getggetägg etgeagegge aetggeggge eeagetggag gtgeaageea geeageaeeg
                                                                      1860
 gctggagctg caggaggccc aggaccagcg ccgggatgcc gagctgcgtg tgcacgagct
                                                                      1920
 ggaaaaactg gacgtggagt accggggcca ggcgcaggct atcgagttcc tcaaggagca
                                                                      1980
 gatctcgctg gccgagaaga agatgttgga ctacgagcgg ctgcagcggg cagaagccca
                                                                      2040
 gggcaaacag gaggtcgaga gtttgcggga gaagctcctg gtggctgaga acagactcca
                                                                      2100
 ggcggtcgag gccctgtgct cctcccagca cacccacatg attgagtcga atgacatttc
                                                                      2160
 agaggagacg atcaggacga aggaaactgt ggagggcctg caggacaagc tgaacaagag
                                                                      2220
ggacaaagag gtgacagcct tgacctccca gaccgagatg ctcagggccc aagtaagtgc
                                                                      2280
gctggagagc aagtgtaagt caggcgagaa gaaggtggac gccctcctga aggagaagcg
                                                                      2340
gegeetggag geagagetgg agacegtgte eeggaagaee catgaegeet egggeeaget
                                                                      2400
 agtecteate agecaggage tgetgeggaa ggageggage etgaaegaae tgegggtgtt
                                                                      2460
gctgctggag gccaatcgtc actccccagg gccggagagg gacctgagcc gtgaggtaca
                                                                      2520
 caaggetgag tggeggatca aggageagaa acteaaggat gaeateeggg geetgegtga
                                                                      2580
 aaagctgacc gggctggaca aagagaaatc cctgtcggat cagaggcgct actccctcat
                                                                      2640
 cgacccgtcc tcggcgcccg agcttctgcg gctgcagcac cagctgatga gcacggagga
                                                                      2700
cgccctgcgg gatgcgctgg accaggctca gcaggtggag aagctgatgg aggccatgag
                                                                      2760
gagetgeect gacaaggeec agaceategg caatteeggt tetgeaaaeg geatecacea
                                                                      2820
gcaggacaaa gctcagaaac aagaggacaa gcactgatcc tgaggggata ctgtggagca
                                                                      2880
gcccagtcca caccagagcc ccactgtatt
                                                                      2910
```

```
<210> 5000
<211> 1448
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (52) ... (462)
<223> similar to gi172168 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5000
tttcgtctgc tggcggccgg gagcgccggt acggggcgct aagccggagg ctccgggacg
                                                                        60
tggatacaga tgaaaagaag caaagaattg ataactaaaa atcatagtca agaggaaaca
                                                                       120
agtattette gttgttggaa atgtagaaaa tgtatagcaa getetggttg ttttatggag
                                                                       180
tatettgaga ateaagtgat taaggataaa gatgatteag ttgatgetea aaatatttgt
                                                                       240
catgtgtggc acatgaatgt agaagcoott coagaatgga täagotgoot aatcoaaaaa
                                                                       300
gcccagtgga cagttggaaa actgaattgt cctttctgtg gggcccgttt agggggcttt
                                                                       360
aattttgtca gcactccaaa atgttcctgt ggccagcttg cagctgtaca tctctccaag
                                                                       420
ageeggaetg attateagee aacacaggea ggeagaetaa tgagaeeate agtgaaatae
                                                                       480
ttgtcacatc ctatagttca gtcaggttgt gacaaggaag ctctgctgac aggtggtggc
                                                                       540
tetgaaaaca gaaateacag gettttaaac atggeeegaa ataataatga eeetggaaga
                                                                       600
ttaacagaag cactctgcct ggaggtgcga ccaacatatt ttgagatgaa gaacgaaaaa
                                                                       660
dtgötgteda aagdatdaga addaaaatad dagdittittg tideddagdi tgigadiggd
                                                                       720
agatgcgcta caagagcttt tcatagaaaa tcacatagtt tggatctgaa catcagtgag
                                                                       780
aaactgactt tattacccac tttatatgaa atacatagta agactactgc ctattccaga
                                                                       840
ctaaatgaaa cacageetat tgacetttea ggettgeett tacaatetag taaaaatage
                                                                       900
tatteettte agaateeate cagttttgat eetagtatge tgetgeaaag atttteagtg
                                                                       960
gcccccatg agacccagac acaaagagga ggagaatttc agtgtggtct agaagctgct
                                                                      1020
tcagtgtatt ctgaccatac taatactaac aatctgactt tcctgatgga cctgcctca
                                                                      1080
getggeagga geatgeegga ggeeteagae eaggaagage accteteece tetggaette
                                                                      1140
ctgcactcag ccaatttttc attgggcagc attaatcaga ggcttaataa gagagaaagg
                                                                      1200
agcaagttga agaatctaag aaggaaacaa cgaaggcgtg aaagatggct acagaagcag
                                                                      1260
ggtaaatact caggagtigg attigctiggat čátatigactt tigaataatiga gatigagtača
                                                                      1320
gatgaagaca atgaatatgc agaagaaaag gatagctaca tctgtgcagt gtgtctggac
                                                                      1380
gtttatttca accettatat gtgttaccet tgccatcaca tettetgtga gecetgetta
                                                                      1440
cggactct
                                                                      1448
```

```
<210> 5001
<211> 1238
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (180)...(464)
<223> similar to gi2911858 in the genepept database release 114,
```

# Run with FASTXY 3.3t00, default parameters

```
<400> 5001
cggccagaaa attgaaagcg ttggacgcc taccggaccg caattcccga tgacgatttc
                                                                       60
gtctgtaacg cagaagcgaa atgtagcgag ccggttgtcg cggctggacg ctcgccttgg
                                                                      120
ctgggggtgt gggggggcac gccgggggcc aaggaggact gtcgaggagg agtgatgtga
                                                                      180
attotogete agecegggte etetteetee tegtggteee aggacacetg gtgtteetet
                                                                      240
acaccatcag ctgtatgcag ggcgggcaca ccaccctcac actcatcttc atcatcttct
                                                                      300
atatgacago tgcactgeto caggtgetga ttetectgta categeagae tggatggtge
                                                                      360
actggatgtg gggccggggc ctggacccgg acaacttctc catcccatac ttgactgctc
                                                                      420
                                                                      480
tgggggacct gcttggcact gggctcctag cactcagctt ccatgttctc tggctcatag
gggaccgaga cacggatgtc ggggactagc ttggtcactc aacattttcc ccatccctct
                                                                      540
gcactttcta tttgaaattt ttcttttgtt cccctgtccc tcctccaccc cacactccca
                                                                      600
cctctttcta ggacttcact ttgataccaa attctcatta ttttcaatgg gaatttttat
                                                                      660
acattgagec aagtttgtat agcaagaatt tgggaaacac agatggeetg agataageag
                                                                      720
tacaagtagg tttttgagac aatcaccaag tgcagtttca tggtgggtgc ctccaggtga
                                                                      780
tgtggactgg agcaggggag ttttgtctgg aatctgggga catggggttt ggctttagca
                                                                      840
acctgtettg gecetaatga gaaaccettt gtaagtggge tetggatttt tggttttgtt
                                                                      900
ttctttttat ctgttttgtt ttatttttgg ttttggttga acagagggac agaagaataa
                                                                      960
gtaacactcc caaacacaga catacttttg tagaagtgga ccaacttcaa agctctggac
                                                                     1020
aggagacace tgetecagge ceetgtgate ecagttetgt tetettgece tetggaceta
                                                                     1080
agegtteeea etegeagaaa gagtaaggtg gaetgaettt teaatttgtg cacatgeete
                                                                     1140
tigticaatg geetggicaa cateaacaae eesteestet gateatities agtigatigt
                                                                     1200
catatecaga aaaaaatgga acagtgcact etteteeg
                                                                     1238
```

```
<210> 5002
<211> 2610
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(769)
<223> similar to gi868189 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5002
gtggaatggg acaaagacca tggggtcctg gagtcccacc tggcggagaa ggggagagc
                                                                       60
atggagetat cegacetgat tgttttcaat gggaaactet acteegtgga tgaceggaeg
                                                                      120
ggggtcgtct accagatcga aggcagcaaa gccgtgccct gggtgattct gtccgacggc
                                                                      180
gacggcaccg tggagaaagg cttcaaggcc gaatggctgg cagtgaagga cgagcgtctg
                                                                      240
tacgtgggcg gcctgggcaa ggagtggacg accactacgg gtgatgtggt gaacgagaac
                                                                      300
ccggagtggg tgaaggtggt gggctacaag ggcagcgtgg accacgagaa ctgggtgtcc
                                                                      360
aactacaacg ccctgcgggc tgctgccggc atccagccgc caggctacct catccatgag
                                                                      420
tetgeetget ggagtgacae getgeagege tggttettee tgeegegeeg egeeageeag
                                                                      480
gagcgctaca gcgagaagga cgacgagcgc aagggcgcca acctgctgct gagcgcctcc
                                                                      540
cctgacttcg gcgacatcgc tgtgagccac gtcggggcgg tggtccccac tcacggcttc
                                                                      600
```

```
660
tegteettea agtteateee caacacegae gaccagatea ttgtggeeet caaateegag
                                                                      720
gaggacagcg gcagagtcgc ctcctacatc atggccttca cgctggacgg gcgcttcctg
                                                                      780
ttgccggaga ccaagatcgg aagcgtgaaa tacgaaggca tcgagttcat ttaactcaaa
                                                                      840
acggaaacac tgagcaaggc catcaggact cagcttttat aaaaacaaga ggagtgcact
tttgttttgt tttgttcttt ttggaactgt gcctgggttg gaggtctgga cagggagccc
                                                                      900
agtcccgggc cccatagtgg tgcgggcact ggacccccgg gccccacgga ggccgcggtc
                                                                      960
tgaactgctt tccatgctgc catctggtgg tgatttcggt cacttcaggc attgactcaa
                                                                     1020
ggcctgccta actggctggg tcgtttcttc catccgacct cgtttcttt ctttcctatg
                                                                     1080
ttettttgtt cagtgaatat cectagaget cetaceatat gteaggeest atgesteace
                                                                     1140
                                                                     1200
ctgagaacgc agtgagcatg aggtggacct gtttgctggg aaccccaggt caccccttt
tetteetaet etgtgeetgg ageateatgt ceacecetge agateettgg aaaagaaaat
                                                                     1260
gtttatgttg cagggtattg catggtcacg agtgagggca ggcccctggg gacacatctg
                                                                     1320
cccacagctg cacaggccag ggcgcaggca catctgttgg ttctcaggcc tcagataaaa
                                                                     1380
ccatctccgc atcatatggc cagtgaccgc tttctccctt caagaaaatt ctgtggctgt
                                                                     1440
gcagtacttt gaagttttaa ttattaacct gctttaatta aagcagtttc ctttcttata
                                                                     1500
                                                                     1560
aagtggaatc accaaatctt atcacacaga gcacagtcct gtagttaccc agcccgctcc
agcagtgcgg gagattgtaa ggaagcggtg gcggctggtg aagcaagtct cacatgtcgg
                                                                     1620
cgttcttggc caatggatac aaagataaag aaaatgttgc ctttttctag gaactgtcag
                                                                     1680
aaatcctcat gcctttcaag acttctgtga atgacttgaa ttttttattc cctgcctagg
                                                                     1740
gtotgtgaac gaggootgto tottocotgg ggtttottto catggoottt atttotcotc
                                                                     1800
ttccagtggg agttttgcag gctcttctct gtggaaactt cacgagcgtt ggctgggcct
                                                                     1860
eggetteget ggagtgtact eeagggtgaa ggeagagtgg gatttgagac eeaggttagg
                                                                     1920
cacgacccag gctgagaagg gacgtttcca tcattcacag tgccctcccc acagcactac
                                                                     1980
ctcacccga ccccaccct cactcctacc ccacccggg atcgtcaggg gtgccacggt
                                                                     2040
gggeeggagg gtgeeggete tggetgteee tgtgeeggte ceteacaaac eteteceeet
                                                                     2100
ttgaaactca agcacagetg egaggagggc agcgaggagg gaccetete teatggttgt
                                                                     2160
ctctttcccc cgctatgtca taggtagtgg aggaagcgaa ggaagtgaac gctgaatgtg
                                                                     2220
acgcatttct gaagagetca getgtcaccg ggcatagect ggaagececa agtetgttet
                                                                     2280
gactttgcct ggctgtctcc ttgacccgcc tcctagatca ttgtccttga tgtccaggct,
                                                                     2340
gggtcattta aaatagagat gcaatcagga aggttggggg acttgggact gtggctgaat
                                                                     2400
tgagaccttg ctgatgtatt catgtcagca cctgagtcac agcccaggtg cccggaagca
                                                                     2460
gestettege ataaggeagt gattttgega attactttaa ageteacett tittetteee
                                                                     2520
ctctctgttc gctgctgtca gcataatgat tgtgttcctt ccctatggga tccatctgtt
                                                                     2580
ttgtaaacaa taaagcgtct gagggagtgt
                                                                     2610
```

```
<210> 5003
<211> 1415
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1161)...(709)
<223> similar to gi746495 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5003
ttttttttt ttcacactgt cacaatttat tgaaatttta taaaaactca ggccaagtgg 60
aagaataagg tacaactcaa gagtacaaag acaactccgt ttccgttcag tacttttctc 120
ctcagcactg gtggtaagaa agccccttgc tcctagtag ccaggcagca tggacttaca 180
```

```
gtcttaaaat gaggctttat gtatttcagg ctggaggcag gttgcctttt ctcctgagga
                                                                      240
atctcaggca gggtaaaagt tacttaccac tcagtacctc tgtgccagaa gaaaagctca
                                                                      300
                                                                      360
atttattcaa teettagaaa agttaetate gteecetggt cagacactaa ggtgtettga
                                                                      420
taaggtccag agacaaccac atagtcctta ttctaattcg tagtgaaaag gctgcaggca
                                                                      480
tatggtgctc ctacgatggg cctgaccctt tectaageac atctcatttc cacatecttt
                                                                      540
qccttctctt tcccccaaca tttccagcca gcatagaacc caatttctgg gaaattgaga
ggagaaacag tattatgaac acagactcct ttcaaattgg aacaggagcc aaaccaaata
                                                                      600
aataagagaa ttgtgtaggg aagtggggta gaagggaggt cagggagcaa tcccttgcct
                                                                      660
caagtetggt geaceteatg gaacateagt teaeggggga tggetgttte tggaccaaac
                                                                      720
ttggtggctg cccgacgctc aaaggcagca acattctgtt tgacaacctc atcaaaaaac
                                                                      780
atggtggcca gctgggagtg cagcagagaa cgaaattcaa aggaaatcga aaagtccaca
                                                                      840
                                                                      900
gtgcaggttc gaggataggc aggaatacca gggctgaatc gccaaatagt ctctaagtgg
ttgaagagct tgccatcagt acaaacagcc ttgaccatgt gaggtttgac catggaaact
                                                                      960
gcagaggtgt aacgttccat gacaggtgga aagccaacct ccagctgggc tttcaaatga
                                                                     1020
                                                                     1080
cccttacggc tggataccac cagagacttc ttaccccagg gcacaaactc acgatactcc
tggacgttgg acaccacctc atacatctcc tgcattgagt accccatgat tctacgctcc
                                                                     1140
gagtaagcct ttcgcttgtt ggtgaaggga gcagcaaatc ccatgaagga acggctcgaa
                                                                     1200
                                                                     1260
ggtaagccag ceteagcege caagatetgg geagceegag geaagaggag getgeaggag
                                                                     1320
gtcagaaacc ccgagaactt cccttctcgt acaacttgca aaagcattat ccaaagctct
acgttagete ccagggeatg attgetgeca gteccegeeg egeetgeate ccagtatage
                                                                     1380
accettecae egeggaacee eggggttege agega
                                                                     1415
```

```
<210> 5004
<211> 988
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (769)...(231)
<223> similar to gil001126 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5004
ttttttttt tttatttggg ttttttttct cttaaaaaga tttattatca aaaagtttgc
                                                                       60
tecetttaaa taetgageea atteateaat geageteeat tetttttagg attattaggg
                                                                      120
                                                                      180
cccaaataat ttcagactaa aacaagaaat aaaaaactgg actataggtt cagtaacata
ttcacagaca tgtcagtgtg cactcaggaa cactggtttc atttcttgat tggaatgctt
                                                                      240
atcaccataa aatcttctgc tagagtcact tcttggagat ctaacactga ttcagcttgc
                                                                      300
ttttttagtt etgeaatgee atetgtttet eettetetgg eeaaggeaac tggtttgtae
                                                                      360
ctctgactga agtgagtcag aaccagcctc tttgcacggc acaactttgc aaatgttgct
                                                                      420
gccatctgtg gtgtgctgtg gccatgctcc tttgctttgt ccatctgggc atcatccagg
                                                                      480
gttgcttcgt ggatcaacag gtctgcttca aagcacagtt ttactcctcc atcacccaca
                                                                      540
accccagage agteacccaa tatgcagatt tttettecaa caataggett ttttaagaca
                                                                      600
tettggggag aaattgtaac eccattttee agaacaacag aaatteeatt ttteagette
                                                                      660
ccataggcag gacctggtgg aacaccaagg tctttaagtt tctgtgcatt gagtttacct
                                                                      720
gggcgtttct tttccacgac tgaaaaccca aatgagggaa ttctgcttta agttggcttt
                                                                      780
teataagetg tgtetgtgtt ceeteeceac agteaaagag ceageacteg cetteacace
                                                                      840
                                                                      900
gaaggaccac agcagaggca ccccgggttg gagatgggta tgctgcaccc gtccccagga
atgtcacate catagacate ttecacecet eteccegagg ecegegeeag gageegaggg
                                                                      960
```

```
<210> 5005
<211> 782
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(423)
<223> similar to gi5706448 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5005 cccacgcgtc cggaccttgg tgatttaagg cggcaggtta aactcttaga agagaagaat 60 accatgtata tgcagaatac tgtcagtcta gaggaagagt taagaaaggc caacgcagcg 120 cgaagtcaac ttgaaaccta caagagacag gtagtagaac tacaaaacag attatccgaa 180 gaatcaaaga aagcagataa actagatttt gaatataagc ggctaaaaga aaaagttgac 240 agtetteaaa aagaaaagga caggetgaga acagaaaggg attetetgaa ggaaaceatt 300 gaagagette gttgtgtaca ageteaagaa gggeagetea caacacaagg gttaatgeet 360 cttggaagtc aggagtcttc agacagtcta gctgcagaga ttgttacacc tgaaatcagg 420 taaggagatt gtggtgttca cacttacact gcacagtatt cttggagaaa acgtacttct 480 ctacaatatg aagaagataa tttccttatt ctttctcacc gacactttca acatgaactc 540 agtgttaaat ttttatgttt tcaacatgtt aaaagctttc ttccactggc ctacggaaaa 600 ttgatttgct cacttcaata agacaatctt tcacacatat aaagccaatt gttatgtcca 660 aagettgagt ateeteagea gacattaage aatgaataca tttggeetgt agacaatagt 720 tatgettage tataageatg caaaattatt agttattaag atttatetge taaceagetg 780 782

```
<210> 5006
<211> 574
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(215)
<223> similar to gi435774 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5006
caagaaagcg gcttcagctg taaaggacct ggccagaatg tggctgtgac cagggcacac 60
cctgactccc aagggaggcg gcggcggcct gagcggggg cccgaggagg ccaggtgttt 120
```

```
tacaacageg agtatgggga getgteggag ceaagegagg aggaceaetg eteceegtet
                                                                      180
gcccgcgtga ctttcttcac agacaacagc tactaagcag catcggacaa gacccccagc
                                                                      240
acttgggggt tcaggcccgg cagggcgggc agagggctgg aggcccaggc tgggaactca
                                                                      300
totggttgaa ototggtggo acaggagtgt cotottcoot ototgcagac ttoccagota
                                                                      360
ggaagagcag gactccaggc ccaaggctcc cggaattccg tcaccacgac tggccagggc
                                                                      420
cacgetecag etgeceegge eceteceect gagatteaga tagaatgtga eetetaggea
                                                                      480
tgatttgcta ggggtgggag cagcatcttt ctgtcaccat tgtgtgaaca gcagggtcag
                                                                      540
atgttcctag tgatatcacg ggaagccttg tttc
                                                                      574
```

```
<210> 5007
<211> 1179
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1180)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3)...(387)
<223> similar to gi4586838 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5007
acgtaattgt gcatgegegg cccatcegea egegggetag caagtactac ateccegagg
                                                                       60
cegtgtacgg cetgecegec tateeggeet aegegggegg eggtggettt gtgettteeg
                                                                      120
gggccacget gcaccgcctg gctggcgcct gtgcgcaggt cgagctcttc cccatcgacg
                                                                      180
acgtetttet gggeatgtgt etgeagegee tgeggeteae geeegageet eaccetgeet
                                                                      240
tecgcacett tggcatecee cageetteag eegegeegea tttgageace ttegaceet
                                                                      300
gettttaccg tgagetggtt gtagtgcacg ggetetegge egetgacate tggettatgt
                                                                      360
ggcgcctgct gcacgggccg catgggccag cctgtgcgca tccacagcct gtcgctgcag
                                                                      420
geceetteca atgggaetee tageteeca etacageece aageteetaa eteagaecea
                                                                      480
gaatggagee ggttteeeag attattgeeg tgtatgtggt tetteeetga teaceaggtg
                                                                      540
cctgtctcca caggatccca ggggatgggg gttaagcttg gctcctggcg gtccaccctg
                                                                      600
ctggaaccag ttgaaacccg tgtaatggtg accetttgag cgagccaagg ctgggtggta
                                                                      660
gatgaccate tettgteeaa caggteecag ageagtggat atgtetggte etectagtag
                                                                      720
cacagaggtg tgttctggtg tggtggcagg gacttaggga atcctaccac tctgctggat
                                                                      780
ttggaacccc ctaggctgac gcggacgtat gcagaggctc tcaaggccag gccccacagg
                                                                      840
gaggtggagg ggctccggcc gccacagcct gaattcatga acctggcagg cactttgcca
                                                                      900
tagctcatct gaaaacagat attatgcttc ccacaacctc tcctgggccc aggtgtggct
                                                                      960
gagcaccagg gatggagcca cacataaggg acaaatgagt gcacggtcct acctagtctt
                                                                     1020
ttcctcacct tcctgaactt cagacaacna ttggccantc tcccactgga aggctgtatc
                                                                     1080
ccctcaagan ggagccaagg aatgtttttc ccctggagat gccacactaa ttaattttcc
                                                                     1140
ccatatggtt taancaaccc cttgggtgaa aaaanccaa
                                                                     1179
```

```
<210> 5008
<211> 2872
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2873)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (38)...(1809)
<223> similar to gi3881530 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5008
tttcgtgcct cgggtgacac ccagatetet etetetecag ggececaaag gtgagagegt
                                                                       60
gggctccatc acacagcccc tgcccagcag ctacctgatc ttcagggccg cctccgagtc
                                                                      120
agatggtege tgetggetgg aegecetgga getggeeetg egetgeteta geetaetgag
                                                                      180
actgggcacc tgcaagccgg gccgagacgg ggagccaggg acctcgccag acgcatcacc
                                                                      240
ctcatcgctc tgtgggctgc cagcctcagc caccgtccac ccagaccaag acctgttccc
                                                                      300
actgaacggg tettecetgg agaacgatge atteteagae aagteggaga gagagaacce
                                                                      360
tgaggagtca gataccgaga cccaggacca tagccggaag acggagagtg gcagcgacca
                                                                      420
gtcagagace cetggggece eggtgeggag agggaceace tatgtggage aggtecagga
                                                                      480
ggagctgggg gagctgggcg aggcgtccca ggtggagaca gtgtcagagg agaacaagag
                                                                      540
totgatgtgg accotgotga agcagotacg gocaggoatg gacotgtoco gogtggtgot
                                                                      600
acccacgttc gtactggagc cgcgctcctt cctgaacaag ctctccgact actactacca
                                                                      660
egeagacetg etetecaggg etgeggtgga ggaggatgee tacageegca tgaagetggt
                                                                      720
gctgcggtgg tacctgtctg gcttctacaa gaagcccaag ggaatcaaga agccgtacaa
                                                                      780
ccccatcctg ggggagacct tccgctgctg ctggttccac ccgcagactg acagccgcac
                                                                      840
attotacata gcagagcagg tgtcccacca cccgcccgtg tctgccttcc acgtcagcaa
                                                                      900
ccggaaggac ggcttctgca tcagtggcag catcacagcc aagtccaggt tttatgggaa
                                                                      960
ctegetgteg gegetgetgg aeggeaaage caegeteace tteetgaace gageegagga
                                                                     1020
ttacaccett accatgeeet acgeecactg caaaggaate etgtatggea egatgaceet
                                                                     1080
ggagctgggt gggaaggtca ccatcgagtg tgcgaagaac aacttccagg cccagctgga
                                                                     1140
attcaaactc aagcccttct tcgggggtag caccagcatc aaccagatct cgggaaagat
                                                                     1200
cacgtcggga gaggaagtcc tggcgagcct cagtggccac tgggacaggg acgtgtttat
                                                                     1260
caaggaggaa gggagcggaa gcagtgcgct tttctggacc ccgagcgggg aggtccgcag
                                                                     1320
acagaggetg aggeageaca eggtgeeget ggaggageag aeggagetgg agteegagag
                                                                     1380
gctctggcag cacgtcacca gggccatcag caagggcgac cagcacaggg ccacacagga
                                                                     1440
gaagtttgca ctggaggagg cacagcggca gcgggcccgt gagcggcagg agagcctcat
                                                                     1500
gccctggaag ccgcagctgt tccacctgga ccccatcacc caggagtggc actaccgata
                                                                     1560
cgaggaccac agcccctggg accccctgaa ggacatcgcc cagtttgagc aagacgggat
                                                                     1620
cctgcggacc ttgcagcagg aggccgtggc ccgccagacc accttcctgg gcagcccagg
                                                                     1680
gcccaggcac gagaggtctg gcccagacca gcggcttcgc aaggccagcg accagccctc
                                                                     1740
cggccacage caggccacgg agagcagegg atccaegeet gagteetgee cagagetete
                                                                     1800
agacgaggag caggatggtg actttgtccc tggcggtgag agcccatgcc ctcggtgcag
                                                                     1860
gaaggaggcg cggcggctgc aggccctgca cgaggccatc ctctccatcc gagaggccca
                                                                     1920
gcaggagetg cacaggcace teteggecat getgagetee aeggeaeggg cagcacagge
                                                                     1980
accgacecca ggeeteetge agageeeeeg ateetggtte etgetetgeg tgtteetgge
                                                                     2040
gtgtcagctg ttcattaacc acatectcaa ataggagece tgggggnaga geteetggee
                                                                     2100
tgtgggggcc ctggacagtc acaccccagc agcagtgagt gggcaggttt ggaggagcag
                                                                     2160
```

```
ccagggagcc ccgagtggcc caggagtccc cccacacac gatgcatagg cctgccttcc
                                                               2220
ggagaccetg tecacattge egggaccace etggtgggge caetggtggg tgecagggae
                                                               2280
aggttagggc cactetgggg aaggcatttt ggttttttat tecaegetgt getgtttgga
                                                               2340
2400
tggtggggc acacgcaggt ggaggtggtt gtgggtgcag gtgtgtgcag gggtgtgggg
                                                               2460
ggcgcagggg tgtggcttag ctggccccgc acccaggccg gggaggctca agttcgccac
                                                               2520
tttactcaga ccgatgcaca gtcttcccat tttacacttt tttaataaac ataattgcaa
                                                               2580
tattttaggt gggctgcgag ctgcagtcag ccttcacgtc tggcctcagt ccccgtgtca
                                                               2640
gtgccgctct gcgtgtgcgt gtgcacgtgt gtgagcctct acacatatat atacgtacag
                                                               2700
agcettaaac cacategtgg eggtgeegte tgagetgtag egggtggett tgttteeagt
                                                               2760
ttttgtaccc gtgtccttgt ctcccctcct cccccatctg gggatgtgtc tgtgttccac
                                                               2820
accttgaaat aaacagacac atacgtgttc tcttcttgcg ggaaaaaaaa aa
                                                               2872
```

```
<210> 5009
<211> 1731
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (62)...(419)

<223> similar to gi3986746 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5009
ggatttcgtg ccaagcttca ggaggccaag cggcaacacc agtcagactg tgtggctttt
                                                                       60
gagggetget accetggaaa aggaagtgge egggttgegg gagaagatee accaettgga
                                                                      120
tgacatgete aagagecage ageggaaagt ceggeaaatg atagageage tecagaatte
                                                                      180
aaaagetgtg atecagteaa aggaegeeae catecaggag eteaaggaga aaategeeta
                                                                      240
tctggaggca gagaatttag agatgcatga ccggatggaa cacctgatag aaaaacaaat
                                                                      300
cagtcatggc aacttcagca cccaggcccg ggccaagaca gagaacccgg gcagtattag
                                                                      360
gatatecaag eegeetagee egaageeeat geetgteate egagtggtgg aaacetgage
                                                                      420
tgcctggaga tggttgctgc cattgctgct gcctctgcct cggagaagcc cactgccct
                                                                      480
gttggctgtt aacactgcct ttgacttcct gactgtcccc tggctgcacc caggacttcg
                                                                      540
ggctcctgtg tctcaccatt cccaagcccc tggccactct aagctgggca gacggagcac
                                                                      600
gagcacctat tcaaggcact gcagcccttt ggaagacatt gtcctgcaag caggagccag
                                                                      660
ggcaatatct atattcctac agtgactatt tttttttgt agagagcctc ccttctgttg
                                                                      720
tagactggac tetggetgeg ceataageea ggeetteate agattgggag aggtgacaag
                                                                      780
atttgcctca gccataaaag ctggagacac agatgtccag agtgattgga gaatgtcctg
                                                                      840
ggggaatgaa gttccttcca caaacacagc tcagttctta gcaacaaact gtttgtttt
                                                                      900
ctacttgete catetgeage ctacgetgee etggeeteet geagacagat agtggggtta
                                                                      960
cctggcaagg cctggtgaga gccagtgaac ctaagctttg actgggtggc ctcgtctttc
                                                                     1020
tggggaggag ggaatgtaca ttcagggagt agccttttgc ggaaaaattc tctagggcta
                                                                     1080
cagacagtca tgtgtgactt ctctctgctg tgaaaactcc cagagtctct ttagggattt
                                                                     1140
tecetaaggt gtaccaccag geacacetea gtettettga eccagageet gaaaaetgtt
                                                                     1200
ttcactgggt tccaccagtc ccagcaaaat cctctttgta tttattttgc taagttattg
                                                                     1260
gtggttttgc ttacatctca tgattgatat aataccaaag ttctatagcc ttctcttgca
                                                                     1320
gtatttggat ttgcttgaaa ccgggaaaac tgttcccatt aggcttgtta atgtcagagt
                                                                     1380
gacactatta tgaatettte tetecettte etetgeetgt ttettetete ttteteette
                                                                     1440
aaacttgctc tgcagctaag gaaggtgagt ctactttccc tgaggctttg gggtcagagt
                                                                     1500
```

```
atatgttgtt tggagaaaga gggcaatcag gactettetg ggacceagat gagttettea 1560 ctagecette tgaacceett getecataat tggtetttta teetggetet gaatgaceet 1620 geaggteate atggtttet ttttttattg gtttttttt tttetgaaac aaagteteat 1680 tetgeaace aggetggagg geaggggeg gateteaget caetgeaace t 1731
```

```
<210> 5010
<211> 1128
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1091)...(779)
<223> similar to gi726373 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5010
aggtggggcc tagtgggagg tgactggatc atgggggtgc atttctcatg aatggtttaa
                                                                       60
cagcatteca ettggtaetg teetettgag tgttettgtg ägatetgggt gtttaaaaca
                                                                      120
tgtgtggcac ctcctcctgc gcccccttgc tcctactctg gccacataag atgtgtctgc
                                                                      180
ttcccctttg cctttccact atgattgtaa gtttcctgag gcctccccag aagcagaagc
                                                                      240
tactatgett cetgtatage etgcagaact gtgagecaat taaacetett ttetttataa
                                                                      300
attaaattac ccagtctcag gtatttcttt acagcaattc gagaatggat taatacaatt
                                                                      360
gccaattttc cttttcttt tttaaaaaat aaaagccaaa ataacacttt taagatccca
                                                                      420
ggttttagac aaggcagctg tagtctctcc atcatcctca ctgtccattt gcttcttcct
                                                                      480
gggacagaca ctgtggccca gtgaagctga ggggaccctg ggattcaaag ctggtggaat
                                                                      540
ggaccetece tecceccaca agetgtaata acetgetgga ateccacaca acetgaggge
                                                                      600
ttcacttgtc aacagctccc ttccctcaga ggctattttg aggcaggcat tcggtgtttt
                                                                      660
atgactgage tacccaggag aatggtttga ggecacaete aactgtteca aggagcagea
                                                                      720
ctggaccaaa ggctgcttgg ttcctgcgg ttcctgatgc caccccttct cttcagggtg
                                                                      780
gttacctggc agaaggcgtc caatgcatcc tccagtgtcc cacgagggtt tccgctgaag
                                                                      840
gagccggcgg ggatgtagta catgggcacc agcagcaggg agaggatcac aaagccaaag
                                                                      900
aggeceteag tgecaactge eegeagtggg tgeacattgt gtttgtagae gaacttetee
                                                                      960
tctagcacca tctggatggc aacgatgatc tgggccatga tgatcaacag gtcccctgtg
                                                                     1020
atcacttcgc tgagcttgtg ctgactgtcg tgcttgctca ggaggtcagc caggcccacg
                                                                     1080
accaccaget cegeaaggee ttegatgaat teetcaegeg gteaatee
                                                                     1128
```

```
<210> 5011

<211> 2377

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (2378)...(808)

<223> similar to gi4240149 in the genepept database release 114,
```

## Run with FASTXY 3.3t00, default parameters

```
<400> 5011
60
gaaaagaaaa ctttgccctt caattcaaac tctgttatgc cacatttggc ataaaatgct
                                                                     120
taccattacc taaaaatgat tttttaaaaa atgcttatca ttacctaaaa gaaaaatgta
                                                                     180
gcaaaattca actttggagg aaaatgaaaa ctgtacatat ccttgagaac cacggaaagc
                                                                     240
taagagatat agaaaattgt acattcccac aaagttattt caacaaagag gcattatctg
                                                                     300
cattccacca aggtcagtcg agttgaggag aaagagaagc aaatgccaaq aaattggctq
                                                                     360
catatttttt ttttaatctg ttttgcctta aatcacaaaq aqcaatqqqa aqaacaaqct
                                                                     420
ccctttctcc ttttctcaga cacctttggt ctaaagttgt tctttttcta gttcttccct
                                                                     480
cccctgtaat ttttaattat cagaaataaa taccagtgca tttcaggtgg tcgtctgtgt
                                                                     540
tagagtgcat aactgaagtt attagtggct tgggagtttg cacatataac tggaggtaaa
                                                                     600
cagcagatta ctacacctaa tctcaccctg agcatttctc ctctgtcaag tctaaattct
                                                                     660
gccatcttct tttgcaaaaa caagcagaca tccccaccaa aggccaaaat ataatgataa
                                                                     720
ctgacagtga acagaaaccc attgtaaaga caaactattc cagctttcaa attcactgtg
                                                                     780
actggatact attagttttt tgagtttata actccccaga attgtcaaaa gtaaccttgt
                                                                     840
agccaatccg cttgcagaca ctaaaaacca cctgaaatag gccacccagg gtaccaaaag
                                                                     900
cagtgtcaaa gagcagtgag acagtgccac caaggcccag tgcaatgtcc ttgcaaacaa
                                                                     960
ttggaatage geeeatggtg tacacaggga aagtggeeac atecacaagg acacggacag
                                                                    1020
ggatgctcag aactcggcaa atggccttca gcagacaaca aaggatccgg aggagagccc
                                                                    1080
tgatgacttt ggccacgacc ttgagcacct tccagggaat gctcaccaac tcttccccaa
                                                                    1140
tggccatgaa gtatgagatg gtggctgagc ccaggcggta aaggcaactt tctatgccat
                                                                    1200
taatcacctg cttggtaaca caccacagga aatagacaat gttcttcagg attgctacca
                                                                    1260
caaggtaata aattaattga aaaagcttga tgaatggggt agcaatgaag cccatgagtt
                                                                    1320
tteccaaaaa getaetaett eeeteagatg eetetggagg caacagagta gaeetettge
tcctggtgct agaaagggga ctagaactct tttgagattg taccattcgt tcttcatcct
                                                                    1440
ggatttggtt aaccacttcc aggatttttt tcattttctc tgtgtcttgc tcagtttcac
                                                                    1500
cacagttgtt ctgaaacagc tgagggttaa atggaagcag tttctgaaga tcttttacca
                                                                    1560
teacatette tatgatgtea etgteeeggg tgtgettgae aaageeeatg geeeageete
                                                                    1620
ctccagggac agcacaacag gctgccagcc aaacaaactc agggactgcc actttgtctt
                                                                    1680
taactetgta gtetgaggge actgtgeetg tgaggatata taggtettee ceactgeeae
                                                                    1740
actgtggggt caaagcccgg tccattaggc tgtggagatt cacataccac cgttcctgga
                                                                    1800
aggactgagt cattggggct gaatttgtga gagtaaatgt ggccacctgg acatcactgc
                                                                    1860
taagggagaa tgggtaaagc tgtcctcttt ggtaatcaga atcaaggtaa tctgtattca
                                                                    1920
aggettgett getteecagg etgtteacag aggtgatgge etetgeetea ttaateqeet
                                                                    1980
ceteaaggtt getgttgggg teategatet geggeteeae eagecatege tgeteggege
                                                                    2040
egeegggege agggegeggg gegeggaaeg eggagtaeae ggggatgegg teeegggtge
                                                                    2100
tgtagagggt ggcgaagcgc tcagcaccct ccgcgcgctg acaqatcttc acqtqqqaat
                                                                    2160
cggccgccag ccccgcaggc ggggtcccgg cgtagaagaa cttgtcacat tcgccaaagc
                                                                    2220
eggetteete etegeeeaeg ageeggeett eeageageee ageeagggeg aagaggetge
                                                                    2280
ccagcgcgag ccagcgcgcg gtgcccatgg cggcctctgc gagcgcggcg gggccgagcg
                                                                    2340
gctgggctgc cgcggcgcga gctctgcagg ctgggcg
                                                                   2377
```

```
<210> 5012
```

<sup>&</sup>lt;211> 5122

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;220>

<221> misc\_feature <222> (2)...(3744) <223> similar to gi189036 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5012 ccaggagttt cggcagagat atgagatect gaetecaaae tecatteeca agggttteat 60 ggacgggaag caggcgtgcg tgctcatgat aaaagccctg gagctcgaca gcaatctgta 120 180 ccgcattggc cagagcaaag tettettecg tgccggtgtg ctggcccacc tggaggagga gegagacetg aagateaceg acgteateat agggtteeag geetgetgea ggggetaeet 240 300 ggccaggaaa gcatttgcca agcggcagca gcagcttacc gccatgaagg tcctccagcg 360 gaactgoget gcctacctga agctgoggaa ctggcagtgg tggcggctct tcaccaaggt caagccgctg ctgcaggtga gccggcagga ggaggagatg atggccaagg aggaggagct 420 ggtgaaggtc agagagaagc agctggctgc ggagaacagg ctcatggaga tggagacgct 480 gcagteteag eteatggeag agaaattgea getgeaggag eageteeagg eagaaacega 540 gctgtgtgcc gaggctgagg agctccgggc ccgcctgacc gccaagaagc aggaattaga 600 agagatetge catgacetag aggecagggt ggaggaggag gaggageget accageacet 660 720 gcaggcggag aagaagaaga tgcagcagaa catccaggag cttgaggagc agctggagga 780 ggaggagagc gcccggcaga agctgcagct ggagaaggtg accaccgagg cgaagctgaa 840 aaagctggag gaggagcaga tcatcctgga ggaccagaac tgcaagctgg ccaaggaaaa 900 gaaactgctg gaagacagaa tagctgagtt caccaccaac ctcacagaag aggaggagaa atctaagagc ctcgccaagc tcaagaacaa gcatgaggca atgatcactg acttggaaga 960 gegéeteege agggaggaga ageagegaea ggagetggag aagaeeegee ggaagetgga 1020 gggagactee acagacetea gegaceagat egeegagete caggeceaga tegeggaget 1080 caagatgcag ctggccaaga aagaggagga gctccaggcc gccctggcca gagtggaaga 1140 ggaagetgee cagaagaaca tggeeetcaa gaagateegg gagetggaat etcagatete 1200 tgaactccag gaagacctgg agtctgagcg tgcttccagg aataaagctg agaagcagaa 1260 acgggacctt ggggaagagc tagaggcgct gaaaacagag ttggaggaca cgctggattc 1320 cacagetgee cageaggage teaggteaaa aegtgageag gaggtgaaca teetgaagaa 1380 gaccetggag gaggaggeca agacecaega ggeceagate caggagatga ggeagaagea 1440 ctcacaggcc gtggaggagc tggcggagca gctggagcag acgaagcggg tgaaagcaaa 1500 cctcgagaag gcaaagcaga ctctggagaa cgagcggggg gagctggcca acgaggtgaa 1560 ggtgctgctg cagggcggaa gggactcgga gcacaagcgc aagaaagtgg aggcgcagct 1620 gcaggagctg caggtcaagt tcaacgaggg agagcgggtg cgcacagagc tggccgacaa 1680 ggtcaccaag ctgcaggtgg agctggacaa cgtgaccggg cttctcagcc agtccgacag 1740 caagtccagc aagctcacca aggacttctc cgcgctggag tcccagctgc aggacactca 1800 ggagetgetg caggaggaga accggcagaa getgageetg agcaccaage teaagcaggt 1860 ggaggacgag aagaatteet teegggagea getggaggag gaggaggagg aggeeaagea 1920 caacetggag aagcagateg ceaceteca tgeccaggtg geegacatga aaaagaagat 1980 ggaggacagt gtggggtgcc tggaaactgc tgaggaggtg aagaggaagc tccagaagga 2040 cctggagggc ctgagccagc ggcacgagga gaaggtggcc gcctacgaca agctggagaa 2100 gaccaagacg cggctgcagc aggagctgga cgacctgctg gtggacctgg accaccagcg 2160 ccagagcgcg tgcaacctgg agaagaagca gaagaagttt gaccagctcc tggcggagga 2220 gaagaccatc tetgecaagt atgeagagga gegegaeegg getgaggegg aggeeegaga 2280 gaaggagacc aaggetetgt egetggeeeg ggeeetggag gaageeatgg ageagaagge 2340 ggagctggag cggctcaaca agcagttccg cacggagatg gaggacctta tgagctccaa 2400 ggatgatgtg ggcaagagtg tccacgagct ggagaagtcc aagcgggccc tagagcagca 2460 ggtggaggag atgaagacgc agctggaaga gctggaggac gagctgcagg ccaccgaaga 2520 tgccaagctg cggttggagg tcaacctgca ggccatgaag gcccagttcg agcgggacct 2580 gcagggccgg gacgagcaga gcgaggagaa gaagaagcag ctggtcagac aggtgcggga 2640 gatggaggca gagctggagg acgagaggaa gcagcgctcg atggcagtgg ccgcccggaa 2700 2760 gaagetggag atggacetga aggacetgga ggegcacate gaeteggeea acaagaaceg ggacgaagcc atcaaacagc tgcggaagct gcaggcccag atgaaggact gcatgcgcga 2820 gctggatgac acccgcgcct ctcgtgagga gatcctggcc caggccaaag agaacgagaa 2880

```
gaagctgaag agcatggagg ccgagatgat ccagttgcag gaggaactgg cagccgcgga
                                                                     2940
                                                                     3000
gegtgecaag egecaggeee ageaggageg ggatgagetg getgaegaga tegecaacag
                                                                     3060
cagoggcaaa ggagcootgg ogttagagga gaagoggogt otggaggooc gcatogooca
                                                                     3120
gctggaggag gagctggagg aggagcaggg caacacggag ctgatcaacg accggctgaa
                                                                     3180
gaaggccaac ctgcagatcg accagatcaa caccgacctg aacctggagc gcagccacgc
ccagaagaac gagaatgctc ggcagcagct ggaacgccag aacaaggagc ttaaggtcaa
                                                                     3240
getgeaggag atggagggea etgteaagte caagtacaag geetecatea eegeeetega
                                                                     3300
                                                                     3360
ggccaagatt gcacagctgg aggagcagct ggacaacgag accaaggagc gccaggcagc
                                                                     3420
ctgcaaacag gtgcgtcgga ccgagaagaa gctgaaggat gtgctgctgc aggtggatga
cgagoggagg aacgccgagc agtacaagga ccaggccgac aaggcatota cccgcctgaa
                                                                     3480
gcagctcaag cggcagctgg aggaggccga agaggaggcc cagcgggcca acgcctcccg
                                                                     3540
ceggaaactg cagegegage tggaggaege caetgagaeg geegatgeea tgaacegega
                                                                     3600
agtcagetee ctaaagaaca agetcaggeg eggggaeetg eegtttgteg tgeeeegeeg
                                                                     3660
aatggcccgg aaaggcgccg gggatggctc cgacgaagag gtagatggca aagcggatgg
                                                                     3720
ggctgaggcc aaacctgccg aataagcctc ttctcctgca gcctgagatg gatggacaga
                                                                     3780
cagacaccac agecteccet teccagacce egeageaege eteteceae ettettggga
                                                                     3840
ctgctgtgaa catgcctcct cctgccctcc gccccgtccc cccatcccgt ttccctccag
                                                                     3900
gtgttgttga gggdatttgg ctteetetge tgeateceet tecageteee teceetgete
                                                                     3960
agaatetgat accaaagaga cagggcccgg gccaggcaga gagcgaccag caggeteete
                                                                     4020
agecetetet tgecaaaaag cacaagatgt tgaggegage agggeaggee ceeggggagg
                                                                     4080
geagagitti etatgaatet attittette agaetgagge ettitggtag teggagetee
                                                                     4140
cccagtegte agectecetg aegtetgeca ccagegeece ccaeteetee teetttettt
                                                                     4200
getgittgea ateacaegtg gitgaeeteac acaeetetge eeetitgggee teecaeteca
                                                                     4260
tggctctggg cggtcagaag gagcaggcct gggctccacc tctgtgcagg gcacagaagg
                                                                     4320
ctggggtggg gggaggagtg gatteeteet acetgteeca geagegeeae tgtegetgte
                                                                     4380
töötötgatt otaaaatgto toaagtgoaa tgooceoteo eeteetttäö ogaggacago
                                                                     4440
etgeetetge cacageaagg etgteggggt caagetggaa aggeeageag cetteeagtg
                                                                     4500
getteteeeg aacaetettg gggaccaaat ataettaatg gttaagggac ttgteecaag
                                                                     4560
tetgacagee agagegttag aggggecage ggeteeecag gegatettgt gtetaeteta
                                                                     4620
ggactgggcc cgagggtggt ttacctgcac cgttgactca gtatagttta aaaatctgcc
                                                                     4680
acctgcacag gtatttttga aagcaaaata aggttttctt ttttcccctt tcttgtaata
                                                                     4740
aatgataaaa ttoogagtot ttotoactgo otttgtttag aagagagtac togtootoac.
                                                                     4800
tggtctacac tggttgccga atttacttgt attcctaact gttttgtata tgctgcattg
                                                                     4860
agacttacgg gcaagaaggg cattititi tittaaagga aacaaactci caaatcatga
                                                                     4920
agtgatataa aagetgeata tgeetacaaa getetgaatt caggteecag ttgetgteae
                                                                     4980
aaaggagtga gtgaaaacac ccaccctacc ccctttttta tataataaaa gtgccttagc
                                                                     5040
atgtgttgca gctgtcacca ctacagtaag ctggtttaca gatgttttcc actgagcatc
                                                                     5100
acaataaaga gaaccatgtg ct
                                                                     5122
```

```
<210> 5013
<211> 866
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (867)...(574)
<223> similar to gi4455118 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5013
ccgatggaga tagccatttt aaaagttttc gatccccttc tttaaaggcg aaatgttttt
                                                                       60
cageceagat aaagecattt taaaagtttt eggteeeett etttaaagat gaaaagtata
                                                                      120
tectaetttt tgttaaatgg atattteett teaatgataa egtteaaaat tteeetgggt
                                                                      180
tttttcccct ttctgagagt taagccattt gaattacctt tattctaacc acaaaatttt
                                                                      240
ttttgtaggg ttttttttt tggttttttt ttgtcttttt ttttgcgttt aaaacatttg
                                                                      300
ggctattccc tgacgatcta tacatgtaaa tttgattgct aaacattgtc actttgaatg
                                                                      360
tcaaactatt tttaatctat tgattttgat taaaaatcat aatacaaaca gagctaaaat
                                                                      420
cacgctaaca aaataaacta aatatgaaaa gttgcattga aagggcatca cattattctt
                                                                      480
aataggatcg tgtagaaaca ttccaatggc agtgttctca aaataaaaca aaattacatt
                                                                      540
agaagacete cageetggee acttttggga cettacetgt aactetgget ggtgggtgte
                                                                      600
tttactcttg tactacatgg ctcacttaca tcagacatca tatttgtata ccctgagaaa
                                                                      660
tetgacactg aagteettae tetatggtee acttetecat tagagttagt gataaaggte
                                                                      720
attggcaccc tgctgcccga cttaaactga gaaccaaacg cttgtgcaaa gttctcaatc
                                                                      780
tgatacgttg ttctaggctc tatgtctttc tgaggatcta tctggctagc taactcctga
                                                                      840
                                                                      866
gatggaatct gaaagcctgt tgaaga
```

```
<210> 5014
<211> 5024
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (125)...(790)
<223> similar to gi4980899 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5014
agtgtggtgg aattcgcaag tattatgcta accagtattt tcttaatttt agttttctca
                                                                       60
                                                                      120
taagattcac cttgaaacta tgtgtgaagt aaagaaaatc taccttcagg atgagtttag
aattttgaag aaaaagteet teaettttee aagagaeeat aagteagtta eagetgatae
                                                                      180
agagatgtgg cctgtctatg tggaattgac caatgaaaag atatatggct gcgatttcat
                                                                      240
                                                                      300
tgtcagtgct acaggagtta caccaaatgt agaacctttt ctccatggta acagttttga
tctaggagaa gatggtggcc tgaaagtgga tgatcatatg cacacatccc ttcctgatat
                                                                      360
                                                                      420
ctatgctgcc ggtgacatct gtactacatc ctggcagctg agcccagtct ggcagcagat
                                                                      480
gaggetgtgg acceaggeta gacagatggg atggtatgca gcaaagtgca tggetgcage
                                                                      540
gagttcagga gactctattg acatggattt cagctttgaa ctgtttgctc atgtgacaaa
attttttaac tataaggttg tactgctggg aaaatacaat gcacagggct taggttcaga
                                                                      600
                                                                      660
tcatgaatta atgctgagat gtaccaaagg acgagaatac atcaaagtcg tcatgcaaaa
                                                                      720
tggacgaatg atgggagetg tettaattgg tgaaaccgat ttagaagaaa catttgaaaa
                                                                      780
cctaatctta aaccaaatga atctttcatc atatggagaa gatctgctag atccaaatat
tgatatagaa gattattttg actaaaaatg gaatttcttc aggaatcata taaagttcca
                                                                      840
                                                                      900
aatgacacca gaaaaatcac aagtcaataa aatgaatgac tgtattgagt taatgatgac
cacactgaaa attacagaag tgataatgat atttgtggaa aaatataaaa acataaattc
                                                                      960
taagtttgaa atcagttcaa agtttattta tagatatatc tttccaacac aacactgacc
                                                                     1020
gcttagataa aaatcttaag ttatttattt ctgtgtttta aacataaata tgtttacttg
                                                                     1080
tgatttagct ttggagcaaa tttaggtaag ttatctactt agccaaatgt actctagtag
                                                                     1140
                                                                     1200
actagaacca ttctttgtga aatgtcaaaa tatggctatg gtttcaggaa ctttaaaatc
                                                                     1260
ggttgtattt tactttaaat agagatgtag caatatctcg tttgctaata tttatattga
```

```
1320
tgacttactc cttttttgtt gaattgtact tctggtttta taacctgaaa tcatttacaa
                                                                     1380
gettgtccaa etetageeca egggtetaat geageecaga acagetttga atgeageeca
                                                                     1440
acacaaatct gtaaactttc ttaaaacatg agatttttct tgcaattttt tttttttaa
gctcatcagc tatcgtcagt gttagcatat tttatgtgcg gcccaagaca attcttcttc
                                                                     1500
caatgtggct cagggaagcc aaaagattgg acatccctga tctacatatt taacttaaag
                                                                     1560
tatcactcag ggaacctctg tcagtataat attgctttca aaaagatggt tatgtcaaaa
                                                                     1620
gaaaaaatat agctaagtat ataaaggcat aaaaaactta agacaattac atgaacttat
                                                                     1680
                                                                     1740
tctcaaatat tttacatttt ttgtaaactt tcttaaaaca tgagattttt cttgcaattt
ttttttttt ttttaagctc atcagctatc gtcagtgtta gcatatttta tgtgcggccc
                                                                     1800
aagacaatto ttottocaat gtggotcagg gaagecaaaa gattggacat cootgatota
                                                                     1860
                                                                     1920
catatttaac ttaaagtatc actcagtgaa cctctgtcag tataatattg ctttcaaaaa
gatggttatg tcaaaagaaa aaatatagct aagtatataa aggcataaaa aacttaagac
                                                                     1980
aattacatga acttattctc aaatatttta cattttttgt aaactttctt aaaacatgag
                                                                     2040
                                                                     2100
atttttcttg caattttttt tttaagctca tcagctatca tcagtgttag catattttat
                                                                     2160
gtgcggccca agacaattct tcttccaatg tggctcaggg aagccaaaag attggacatc
                                                                     2220
cttgatctac atatttaact taaagtatca ctcagtgagc ctctgtcagt ataatattgc
                                                                     2280
tttcaaaaaq atagttatgt caaaagaaaa aatatagcta agtatataaa ggcataaaaa
acttaagacg attgtatgaa cttattctca aatattttac atttaaaggg ttttacataa
                                                                     2340
                                                                     2400
aaatttttcc cttgttttat actggaaaat tatataattc atgatctcta attttcaaac
                                                                     2460
attotoaaaa gtttagatot toagagataa gototgaaaa tatagatooa tacatataaa
                                                                     2520
atatctatga aattetttta aaaaetattg tetaaetaca aaaataatgg catatacatg
                                                                     2580
cataaaccat ctttaattag aaaatttagt aacattcata tcaggcatca tcgattgttc
ttttcttagc tcctgtattc ttagaaccag attgctgaag catgtttgca gccttcttct
                                                                     2640
ggaagttgcc tgaatttttt ttcctccatt ctttttatca ccttgttcag aatgacaagt
                                                                     2700
                                                                     2760
ttgagacgat tcagccctga aagagttctg cgtggacttt gtcacttgca tagtaatagc
atgtgcctca ttgttcagaa gattagcttt aggtcctatt ttcaaatacg aaatggcagc
                                                                     2820
ataagctgta aaactgtagt cttctttaag atactgctgt attagaaagt gtgcaataat
                                                                     2880
cttctccaga tcttcacgag gaagtgtggg agccacaaca cctgctactc tcagttttgc
                                                                     2940
tgcacccttt cccatccaag aatcaatcag tttcaatgga gtgagttttt cattcagttc
                                                                     3000
ctctgcctgc ttcaggatct tgattagatc tctgcagtac tctgttatgt tcgttctttc
                                                                     3060
aaatgcactg totttacagc agttatcgca cattttgtta catgcttctg agttccatac
                                                                     3120
ttcatcaaaa tgttgagcca tcaacacacg acgagatttg cttatgtttt gacagtatga
                                                                     3180 4
                                                                     3240
taccatctca taaagcttct gctgtcccac attttccatc accaccattg aacttattct
gaatatatet ccaaageegt agtacaaaat acagtetget tteatgteat etegacetge
                                                                     3300
                                                                     3360
acgtccactc tcttggtaat aattttccat ggatttactc attgaatgat ggataacaaa
ceteacatet ggettateaa tteecatace aaatgeaaca gttgeeacta etacetgaat
                                                                     3420
                                                                     3480
ttcattggct gaccattttc tatgaactgt ggtcttatct tctggctcca aattggcatg
                                                                     3540
gtaagcacct gcatgaattc ccagattctg caaactaacc gtaacttgtt cagagtcttt
                                                                     3600
ctgagaaaaa caatatatga ttcctgattg ccctttgtat ctcccattaa tgagctttac
                                                                     3660
aatatcctca ataaaatctt cagtgtttga gggcttctgc cgaacctcat aatatagatt
                                                                     3720
tggcctatta aaagaagctg taaaagtaaa acacttttca atgcacaaaa ttttctgagc
atccgtcaaa acgtgatttg ttgcagttgc agtcagccca attagtgatg cgttagggaa
                                                                     3780
                                                                     3840
ctgccgcttt aagataccaa gtgccttata atcaggtctg aaatcatgtc cccactgact
acagcagtga acttcatcca cagcaattcg agtaaatctc cttgcttcat aggctttctc
                                                                     3900
                                                                     3960
tagtettgae ataaacattt tgetttttge aattttetet ggagteacat aaateagett
taactcggag tttttattta ccatttcatc atgaacccat ttaacatgct ccttagaact
                                                                     4020
agaagcattt aacatggttg ctgaaattcc taattgtttt aaaaccatta attggtcttc
                                                                     4080
                                                                     4140
cataagagag atcaatgggc aaatgacgag tgtaaaacca tctgaacata atgctggtaa
                                                                     4200
ctggtaacat aagctctttc cacctcctgt aggcataaca agaaatacct cctttccagc
cattgttacg ttaatagttt caagctgaag tggtctgaac ttttccagtt taaagacatt
                                                                     4260
                                                                     4320
ttgcagaata tetttaaett taecagaeca tggaaaatet tetttattee aageggeagg
tgaagaatca tattcattge ttgeceegge atcagaatee tetaaacaet getttatttt
                                                                     4380
ctttgtcagg acttttttt tctgaataag ctcttgttgc ctttccgtaa gttcttgaat
                                                                     4440
ttgaatttet aetgeatgta geteaetggt tatagaatee agtteeteag ttagagetga
                                                                     4500
aacggacgcc attetttte tttecaaatt gtttetaaaa taatecaaat ttetttaaca
                                                                     4560
aatggcagct gctaataaac aggctttggt ggccaatcct cctgcatgga aaagaatggg
                                                                     4620
                                                                     4680
gagatcagaa gaccggtcag caggcgaacg tgcccctaaa ggcccgagtt ctcagagcag
```

```
ggcagtgatt aactttccgg tttctcctcc gccaatgtgt gggcgaaagg aagtgatccg 4740 catcagaccg gcctcgcctg cagcaggaaa gggaaggatg aaagaaaaag cgcacaccct 4800 tgacccttca aagctgtaac agtagttatc ccagagcctg tcccaccga gaagcccagt 4860 ctaactctcc ggtgtttgac tgtccggtgt ccgactgtcc tgtgtccgac tctccgatct 4920 ccgactctcg gatctccgac accaaagcac ccaggcctcg agcagatctt ttcgctactc 4980 ctacctatct aaaattttat actaataatc ttataaaaaa aaaa 5024
```

```
<210> 5015
<211> 918
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (919)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (128) ... (458)
<223> similar to gil857435 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
< 400> 5015
ctgggccagt ggtatgagca cggtgccagg tggctcccgc cactccctgg ggatccaagt
                                                                       60
geggggtgge tggggtgtaa etgggggaga ggaggagage eteaetgtee etgtegetga
                                                                      120
cacctggcag gcggggagct ttaaggtggc cacccaggag aggaaccccc agagagccca
                                                                      180
gatgaggetg eggaggeaga agaagggtgt ggteeeette etggggggatt ttetgaetga
                                                                      240
gttacagagg ctggattcgg ccatcccgga cgacctggat ggcaacacca acaagaggag
                                                                      300
caaggaggtc cgagttctgc aggaaatgca gctgctccaa gtggctgcca tgaattacag
                                                                      360
getteggeet ettgagaaat ttgteaceta ttteacaaga atggageage teagtgacaa
                                                                      420
agagagetae aagetgteet geeagetgga geeegaaaae eegtaggetg geaacateet
                                                                      480
gcagtggctg ggaacccacc gggatgctgg ccagaacacc ggctctgcac catccctcac
                                                                      540
ccagaccgta gacaccaggg aaccacatct aggaggctgg cagetcaget gcatettgce
                                                                      600
etggateete ateaceaact geteetgetg geeaggatea ggeeatggga ettttqtqaq
                                                                      660
tcaggoggga gaccatttta totttatttt ctttagtgta taagtaaggg ttttttctta
                                                                      720
actiticgita agatagaatt tiagagaatt atticagaatg tictgtagti gitggaatga
                                                                      780
gaaaagtaac tocagtgogg taaccatata coagtottta ggattoatag cotagoatgt
                                                                      840
caaattgagg ctatggctga ccaagttatg gaatagctgt cncgtcttac ggtctctate
                                                                      900
anggtotoat tggagtgo
                                                                      918
```

```
<210> 5016
<211> 1625
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (30)...(215)
<223> similar to gi2662057 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5016
ggattatecg ggtcgaccca cgcgtccgcc caaaagaggt taaccttgat tttcacacaa
                                                                       60
atgaagtcat tacaaacagc atcactcaac ctaccctcca cagttttgat gctgcacaaa
                                                                      120
                                                                      180
gcagagtgta tcagctcatg gaacaagaca gttatacacg ttttctgaaa tctgacatct
atttagactt gatggaagga agacctcaga gaccaacaaa tottaggaga cgatcacgct
                                                                      240
catttacctg caatgaattc caagatgtac aatcagatgt tgccatttgg ttataaagaa
                                                                      300
aattgatttt geteattttt atgacaaact tatacatetg ettetaacat ategeatgtt
                                                                      360
tatgttaaga tttggtccca tcctttaaac tgaaatatgt catgtgaaat tattttaaaa
                                                                      420
atgtaaaaac aaaactttot gotaacaaaa tacatacagt atotgccagt atattotgta
                                                                      480
aaaccttcta tttgatgtca ttccatttat aatcagaaaa aaaacttatt tcttaatcaa
                                                                      540
aaggcagtac aaaaaaagta ataatgtttt ataagattgt agagttaagt aaaagttaag
                                                                      600
cttttgcaaa gttgtcaaaa gttcaaacaa aagtctagtt gggatttttt accaaagcag
                                                                      660
cataatatgt gttatataaa cataataata ctcagatatc caaatgttca gatagcattt
                                                                      720
ttcataatga atgttctctt ttttttggta atagtgtaga agtgatctgg ttcttacaat
                                                                      780
gggagatgaa gaacatttat tattgggtta ctactaaccc tgtcccaaga atagtaatat
                                                                      840
cacctctagt tataagccag caacaggaac ttttgtgaag acacattcat ctctacagaa
                                                                      900
cttcagatta aatataatct agattaatga ctgagaataa gatccacatt tgaactcatt
                                                                      960
cctaagtgaa catggacgta cccagttata caaagtactt ctgttggtca cagaaacatg
                                                                     1020
accagatttt gcatatctcc aggtagggaa ctaagtagac taccttatca ccggctaaga
                                                                     1080
aaacttgcta ctaaactatt aggccatcaa tggcttgaat aaaaaccaga gaaggttttt
                                                                     1140
cccaggacgt ctcatgtttg gccctttaga attggggtag aaatcagaaa tgagatgagg
                                                                     1200
ggaagaagca aggagtctaa ggccctagcg atttgggcat ctgccacatt ggttcatatt
                                                                     1260
cagaaagtgt tatctcattg attatattct tgttaagcaa atctccttaa gtaattatta
                                                                     1320
ttcaaataag attatactca tacatctata tgtcactgtt ttaaagagat atttaatttt
                                                                     1380
taatgtgtgt tacatggtct gtaaatattt gtatttaaaa atgccatgca ttaggctttg
                                                                     1440
gaaatttaat gttagttgaa atgtaaaatg ggaaaacttt agatcatttg tagtaataaa
                                                                     1500
tatttttaac ttcattcata cagttaagtt tatctgacaa taaaagctct gactgaatgg
                                                                     1560
tgattatcct tcctattatg taataaggaa taaacatttt cttcttttag agtggaaaaa
                                                                     1620
aaaaa
                                                                     1625
```

```
<210> 5017
<211> 758
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (28)...(315)
<223> similar to gi507319 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5017 cggacctgta ttgggaacaa tgtttttggg aacgcgtgca tctctgtgct gagccctggg 60 actgtgataa cggagcacta tggacccacc aacatccgca tccgatgcca tttaggtctg 120 aaaactccaa atggctgtga gctggtggtg gggggagagc cccagtgctg ggcagaaggg 180 egetgeette tetttgatga etettteetg catgetgegt teeatgaagg tteageagag 240 gatggcccac gggtggtttt catggtggat ttgtggcatc caaacgtcgc agcggccgaa 300 cggcaggctc ttgatttcat ctttgctccg ggacgatgag agtatttccc atgctggagt 360 eggegagaag ggeegaggeg gggeetggge agaetgtggt eeggteeagt eeetaeeggt 420 gttgtttcca tgctcagaaa cctgcctcag cggaaagctc ttatttggga ttttatatca 480 tgtcgggtcc ctctttccct tggttattgt aaatggaaac ttttcggctt gtatttcctt 540 agattttttt tttttttcct tecaatcatt tgetteagag acteetttet ggeetaacag 600 cgcattcctt tgattggtcc ttgagtgacc agagacttag tgcccttgta agtctgtctt 660 ctgttgctac ttgttttttt cagtgctctg aaatagagta acctaaatgg ttatttgtct 720 gaatataata atgtaaaact tettgtgggt catettaa 758

```
<210> 5018
<211> 2409
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2410)...(265)
<223> similar to gi5739208 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5018
tttggacaat gaaatcettt taattgaaaa gtatatataa aatggettta gacataaaag
                                                                        60
ataagtattt tacattattt ettetgttat atttttaege titgtgeeag aatttaette
                                                                      .120
ttgcaactat tettgetttä tetggaacag tttaeteegt tattgaatat etattagtgt
                                                                       180
ttaatataga agagettaat aaacegetaa teegaaaata atggtattee ettgetttte
                                                                      240
agacettttt getgaatatg ettatttatg tecaatgtgg aaatetgate etgttetett
                                                                       300
ccactetgee ageagtteet tttgtactge ttetggtagt teatagaaaa ettgaggate
                                                                      360
aatgtcagaa gggaaagtaa ttttctcatc aacagaatct ggctctctat tttctgtaag
                                                                       420
teetteatga gagtetgttg etactgtttg ettatggeta tetgtagtgt ggtttetgga
                                                                       480
gaaaagttgc tcactctgca agtttggaaa tgaatgaaaa gcagacacag cagggtttga
                                                                       540
attiguaaag tggaatcott gaggttottt aggtoottga ottattogtt catottttaa
                                                                       600
tetattatet aaataatatg aataateett ttggetagae atgtaagaag äactaetget
                                                                       660
attaaageet gatgtteeeg gtteacaagg agatacagag gatacetgtt tgetaetgga
                                                                       720
taaatgatet etaggattta tgggaatate ttgeatttgt tttttagaaa agaaagataa
                                                                       780
tactcctcta gaggcatgta atggacaact cacacttcct ttcccttgaa atttttccct
                                                                       840
agattttcca gaaaggattt cttcttgaat atctactgga agctgcttga agacttcttg
                                                                       900
gtcaacacct tcaggaagtg aacagagtgg gaattcatta atgtcttttt ctttagaaaa
                                                                       960
atttgtggta totagtggag actccctagt tottgtactt toaattotto cacttggtag
                                                                      1020
gaaatcccgg titgtitctt tgtctttggg aaaatcttcc atatgagtgt ctttcatttt
                                                                      1080
aaaactgtgc ttgccagagc gtgaagtagt tgataatgat ggcattaaat aataatcaat
                                                                      1140
aagccctttc ttagcagtat ttagtgcttt aaggttgcag aagcacacac ttagaagggt
                                                                      1200
aaggtgaaat ggcatcttca cattcaccat atttcgaaaa agtttcataa gtatatcaac
                                                                      1260
cattiggggtc atcacatcat aatttcctgt ccctaatttc tgaattacat gtgaaggaat
                                                                      1320
agggcactga cgacteteac gaccatagtg etteteagag gaatacegae ggattattaa
                                                                      1380
```

```
tctcactgta tgaggcttcc tttcatcttg gcataatctg tttaaaagac tagcaagtag
                                                                    1440
ttcttcaatc ttattttag cttcaacttc agatgaacat tttttaaatq aatcttcttc
                                                                    1500
actaaaggac tgaggtggtc ctgagagtat cacaggggag ttatcctctc caaaactgag
cttttggata cgctgagcaa ctgaaattcc taattctttt tctaaaattt tgggtgaaaa
                                                                    1620
ggtttggaga tcacgcacac tattgatacc cagtgcttca agacatttgg cagttttata
                                                                    1680
gccaatacca ggtatttcct ttatgtgatt caaactatga ataagatgtt gacaactttc
                                                                    1740
aggtaataag actgtttgtt gatttggttt aaagacacca gaaactaatt ttgccaacag
                                                                    1800
tttattagaa gccactccag cacagccagt gagccccaac tgattataca tggcttcccg
                                                                    1860
catctctgct gcaatctgag atccaacaag tagtctgatg tgcaagacgt caagcaggtt
                                                                    1920
tatagactga ttattgtata catgacccga cacagtcacc gcagaaagtt catcactttg
                                                                    1980
cagctgctgt agtctcctct caaccatgtc tgttagatcc acaaaatttt catcaaatcc
                                                                    2040
aagtetetea acaactggae taaattette cagtaattet gtaacettat aagacattte
                                                                    2100
totgtagogg gtoaggtott otocattaac taataccaac tgtqqacact tttcttttqc
                                                                    2160
atctctgaca ttcataagtt tcttaactcc aagtttccta gcttcatagt tgcaggtaac
                                                                    2220
caccaaatat ttctgttgaa cccctaaagg tttgtctttt agctctggat ttgagatcat
                                                                    2280
ttctacttgt gcataaaagc aatccagatc cacatgtact atgactctgg atgaagcatt
                                                                    2340
tggtgtgggc aacacttgat catgaactcc ctgcgagctg gctgccgccc ccacgtccgc
                                                                    2400
cagttccat
                                                                    2409
```

```
<210> 5019
<211> 486
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(440)
<223> similar to gi1403532 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5019
ctateaetta agagaeetta teaaaageat getteatgat gateeageea gaagaattee
                                                                       60
tgctgaaatg gcattgtgca gcccattctt tagcattcct tttgcccctc atattgaaga
                                                                      120
tetggteatg etteceacte cagtgetaag actgetgaat gtgetggatg atgattatet
                                                                      180
tgagaatgaa gaggaatatg aagatgttgt agaagatgta aaagaggagt gtcaaaaata
                                                                      240
tggaccagtg gtatctctac ttgttccaaa ggaaaatcct ggcagaggac aagtctttgt
                                                                      300
tgagtatgca aatgctggtg attccaaagc tgcgcagaaa ttactqactq qaaqqatqtt
                                                                      360
tgatgggaag tttgttgtgg ctacattcta cccgctgagt gcctacaaga ggggatatct
                                                                      420
gtatcaaacc ttgctttaat cagtaaccta aggactgttt cctttttctc ctcttccatt
                                                                      480
tcttgg
                                                                      486
```

```
<210> 5020
<211> 1590
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1)...(1591)
<223> similar to gi5802879 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5020
atgggtagca acagtgggca ggctggccgc cacatétata aatecetage tgatgatggc
                                                                       60
ccctttgact ctgtggagcc gcctaaaaga cccaccagca gactcatcat gcacagcatg
                                                                      120
gccatgttcg gaagagagtt ctgctacgcg gtggaggcag cqtatqtqac cccaqtcctq
                                                                      180
ctcagcgtag gtctgcccag cagcctgtac agcattgtgt ggttcctcag ccccatcctg
                                                                      240
ggatteetge tgeageeegt ggteggateg geeagegaee aetgeeggte eaggtgggge
                                                                      300
egceggagae cetacateet caccetggga gteatgatge tegtgggeat ggetetgtae
ctcaatgggg ctactgttgt agcagetttg attgctaacc caaggaggaa getggtttgg
                                                                      420
gccataagtg tcaccatgat aggtgtcgtt ctctttgatt ttgctgccga cttcattgat
                                                                      480
gggcccatca aagcctactt atttgatgtc tgctcccatc aggacaagga gaagggcctc
                                                                      540
cactaccatg ccctcttcac aggttttgga ggtgccctgg gttacctttt gggtgctata
                                                                      600
gactgggccc atctggagct gggaagactg ttgggtacag aattccaggt catgttcttc
                                                                      660
ttctctgcat tggtgctcac tttgtgtttt actgttcatc tgtgcagtat ctctgaagcc
                                                                      720
ccacttacag aggttgcaaa gggcattccc ccacagcaaa cccctcagga ccctccattg
                                                                      780
tcatcagatg gaatgtacga gtatggttct atcgagaaag ttaaaaatgg ttacgtaaat
                                                                      840
ccagagctgg caatgcaggg agcaaaaaac aaaaatcatg ctgaacagac tcgcagggca
                                                                      900
atgacattaa agtcactget gagageactg gtgaacatge etecteacta eegetaeett
                                                                      960
tgcatcagcc acctcattgg atggacggcc ttcctgtcca acatgctgtt cttcacagat
                                                                     1020
tteatgggee agattgtgta eegeggggat eeetatagtg cacacaacte cacagagttt
                                                                     1080
ctcatctacg aaagaggagt cgaggttgga tgttggggct tctgcatcaa ctccqtqttt
tecteaettt attettaett teagaaagtt tiggtateet acatiggatt aaagggiett
                                                                     1200
tacttcacgg gatatttgct gtttggcctg gggacgggat ttattgggct cttcccgaat
                                                                     1260
gtctactcca ccctggtcct gtgcagcctg tttggtgtaa tgtccagcac cctgtacact
                                                                   . 1320
gtgcccttta acctcattac tgagtaccac cgcgaggaag aaaaggagag gcagcaggcc
                                                                     1380
ccaggagggg acccagacaa cagcgtgaga gggaagggca tggactgcgc caccctcaca
                                                                     1440
tgcatggtgc agetggctca gatcetggtc ggaggtggcc tgggctttct ggtcaacaca
                                                                     1500
gccgggaccg ttgtcgtcgt ggtgatcaca gcgtctgcgg tggcactgat aggctgttgc
                                                                     1560
tttgtcgctc tctttgttag atatgtggat
                                                                     1590
```

```
<210> 5021
<211> 1236
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1237)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (95)...(875)
<223> similar to gi1322971 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5021
ctccggtagc actcgggccg gcggacagtg agggcgcgac aacaagggag gtgtcacagt
                                                                       60
tttccattta gatcaacaac ttcaagttct taccatggaa aattccgaga agactgaagt
                                                                      120
                                                                      180
ggttotoott gottgtggtt cattoaatoo catcaccaac atgcacctca ggttgtttga
                                                                      240
gctggccaag gactacatga atggaacagg aaggtacaca gttgtcaaag gcatcatctc
tectgttggt gatgeetaca agaagaaagg acteatteet geetateace gggteateat
                                                                      300
ggcagaactt gctaccaaga attctaaatg ggtggaagtt gatacatggg aaagtcttca
                                                                      360
gaaggagtgg aaagagactc tgaaggtgct aagacaccat caagagaaat tggaggctag
                                                                      420
tgactgtgat caccagcaga actcacctac tctagaaagg cctggaagga agaggaagtg
                                                                      480
gactgaaaca caagatteta gteaaaagaa ateeetagag eeaaaaacaa aagetgtgee
                                                                      540
                                                                      600
aaaggtcaag ctgctgtgtg gggcagattt attggagtcc tttgctgttc ccaatttgtg
                                                                      660
gaagagtgaa gacatcaccc aaatcgtggc caactatggg ctcatatgtg ttactcgggc
tggaaatgat gctcagaagt ttatctatga atcggatgtg ctgtggaaac accggagcaa
                                                                      720
cattcacgtg gtgaatgaat ggatcgctaa tgacatctca tccacaaaaa tccggagagc
                                                                      780
cctcagaagg ggccagagca ttcgctactt ggtaccagat cttgtccaag aatacattga
                                                                      840
aaagcataat ttgtacagct ctgagagtga agacaggaat gctggggtca tcctggcccc
                                                                      900
tttgcagaga aacactgcag aagctaagac ataggaatte tacagcatga tatttcagac
                                                                      960
                                                                     1020
ttcccatttg gggatctgaa acaatctggg agttaataac tggggaaaga agttgtgatc
tgttgcctaa actaaagctt aaaagtttag taaaaatcgt ctgggcacag tggctcacgc
                                                                     1080
ctgtagtece ageaetttgg gaggetgagg egggtggate geggggteag gagategaga
                                                                     1140
ccatcctggc caatatggtg aagccccatc tctactgaaa atacanaaat tggctgtgtg
                                                                     1200
tggggcacgt gcctgtggtc ccagctgctt ggnggg
                                                                     1236
```

```
<210> 5022
<211> 2902
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1887)
<223> similar to gi4240239 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5022 -
gatggcggcg gcagcagtcg acagcgcgat ggaggtggtg ccggcgctgg cggaggaggc
                                                                       60
cgcgccggag gtagcgggcc tcagctgcct cgtcaacctg ccgggtgagg tgctggagta
                                                                      120
catcetgtgc tgeggetege tgacggeege egacategge egtgteteca geacetgeeg
                                                                      180
geggetgege gagetgtgee agageagegg gaaggtgtgg aaggageagt teegggtgag
                                                                      240
gtggccttcc cttatgaaac actacagccc caccgactac gtcaattggt tggaagagta
                                                                      300
taaagttegg caaaaagetg ggttagaage geggaagatt gtageetegt teteaaagag
                                                                      360
gttettttea gageaegtte ettgtaatgg etteagtgae attgagaace ttgaaggaee
                                                                      420
agagattttt tttgaggatg aactggtgtg tatcctaaat atggaaggaa gaaaagcttt
                                                                      480
gacctggaaa tactacgcaa aaaaaattct ttactacctg cggcaacaga agatcttaaa
                                                                      540
taatettaag geetttette ageageeaga tgaetatgag tegtatettg aaggtgetgt
                                                                      600
atatattgac cagtactgca atcetetete egacateage etcaaagaca tecaggeeda
                                                                      660
```

```
aattgacagc atcgtggagc ttgtttgcaa aacccttcgg ggcataaaca gtcgccaccc
                                                                      720
cagettggee tteaaggeag gtgaateate catgataatg gaaatagaae tecagageea
                                                                      780
ggtgctggat gccatgaact atgtccttta cgaccaactg aagttcaagg ggaatcgaat
                                                                      840
ggattactat aatgccctca acttatatat gcatcaggtt ttgattcgca gaacaggaat
                                                                      900
cccaatcagc atgtctctgc tctatttgac aattgctcgg cagttgggag tcccactgga
                                                                      960
gcctgtcaac ttcccaagtc acttcttatt aaggtggtgc caaggcgcag aaggggcgac
                                                                     1020
cctggacatc tttgactaca tctacataga tgcttttggg aaaggcaagc agctgacagt
                                                                     1080
gaaagaatgc gagtacttga teggecagca egtgactgca gcaetgtatg gggtggtcaa
                                                                     1140
tgtcaagaag gtgttacaga gaatggtggg aaacctgtta agcctgggga agcgggaagg
                                                                     1200
categaceag teataceage teetgagaga etegetggat etetatetgg caatgtacee
                                                                     1260
ggaccaggtg cagettetee tectecaage caggetttae ttecacetgg gaatetggee
                                                                     1320
agagaagtet ttetgtettg ttttgaaggt gettgacate etecageaca tecaaaceet
                                                                     1380
agacccgggg cagcacgggg cggtgggcta cctggtgcag cacactctag agcacattga
                                                                     1440
gcgcaaaaag gaggaggtgg gcgtagaggt gaagctgcgc tccgatgaga agcacagaga
                                                                     1500
tgtctgctac tccatcgggc tcattatgaa gcataagaqq tatqqctata actqtqtqat
ctacggctgg gaccccacct gcatgatggg acacgagtgg atccggaaca tgaacgtcca
                                                                     1620
cagectgeeg caeggeeace accageettt ctataaegtg etggtggagg aeggeteetg
                                                                     1680
tegataegea geecaagaaa aettggaata taaegtggag eetcaagaaa tetcacaece
                                                                     1740
tgacgtggga cgctatttct cagagtttac tggcactcac tacatcccaa acgcagagct
                                                                     1800
ggagatccgg tatccagaag atctggagtt tgtctatgaa acggtgcaga atatttacag
                                                                     1860
tgcaaagaaa gagaacatag atgagtaaag tctagagagg acattgcacc tttgctgctg
                                                                     1920
etgetatett: ccaagagaac gggacteegg aagaagaegt etceaeggag ecetegggac
                                                                     1980
ctgctgcacc aggaaagcca ctccaccagt agtgctggtt gcctcctact aagtttaaat
                                                                     2040
accepted cttccccage tecaaagaca atettectct ccecctacac tagteaatta
                                                                     2100
atctgaaagg cactgtgtca gtggcatggc ttgtatgctt gtcctgtggt gacagtttgt
                                                                     2160
gacattetgt etteatgagg teteacagte gacgeteetg taateattet ttgtatteac
                                                                     2220
tecatteece tgtetgtetg catttgtete agaacattte ettggetgga cagatggggt
                                                                     2280
tatgcatttg caataatttc cttctgattt ctctgtgqaa cqtqttcqqt cccqaqtqaq
gactgtgtgt ctttttaccc tgaagttagt tgcatattca gaggtaaagt tgtgtgctat
                                                                     2400
cttggcagca tcttagagat ggagacatta acaagctaat ggtaattaga atcatttgaa
                                                                     2460
tttatttttt tctaatatgt gaaacacaga tttcaagtgt tttatctttt ttttttaaat
                                                                     2520
ttaaatggga atataacaca gttttccctt ccatattcct ctcttgagtt tatgcacatc
                                                                     2580
tctataaatc attagttttc tattttatta cataaaattc ttttagaaaa tgcaaatagt
                                                                     2640
gaactttgtg aatggatttt tecatactea tetacaatte etecatttta aatgaetaet
                                                                     2700
tttatttttt aatttaaaaa atctacttca gtatcatgag taggtcttac atcagtgatg
                                                                     2760
ggttcttttt gtagtgagac atacaaatct gatgttaatg tttgctctta gaagtcatac
                                                                     2820
tccatggtct tcaaagacca aaaaatgagg ttttgctttt gtaatcagga aaaaaaaaa
                                                                     2880
ttaatgaacc ttaaaaaaa aa
                                                                     2902
```

```
<210> 5023
<211> 1113
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (984)...(564)
<223> similar to gi1913888 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5023 agttgcgggg atttttataa caccatatat ggatatatat ggctatattt ttgcttatcg 60 ttcattgcct cagcgataaa gggaaataaa aatattgatc tataaaataa gccgatgata 120 acacaatgcc aaaaaatagc ttatggttaa agtgccaagg gggtgaaggc ttgaaagcaa 180 240 ttcttggaaa tatggcttct catttttagg tttacttttg gaaaaactac tctatataca 300 catatccagg ttgtaacact tggacagtag cattatgggg catgatataa ctttggtaca 360 420 cattgcagat atggatgttt aatgtctgta aatgatattc cttcaccagt tagacttctg 480 tacatccagg tgaccagcca cctggttcta agtcatatcc caccagaatc cctggagtcc ttgccagage catcagagae agcaggegaa agcaggetea etgaateeat attgtgttte 540 ctctctcqgt tctcctgggt tccactgtca gttctccaaa cgtggaaaaa aactgctcca 600 660 tttctttctg tagcatgica tttcttttct cggcatcttc ttttgctcgc tcggcatttc 720 geatttttat tictateatt gigaacttit teeteteetg atecagitea teatggagge 780 tcatcatttc tgtttccaaa gtcaagtttc gctgttctaa gctctttatc ctggactcat 840 actictation of the control of the co tgtggttgct gctgctgttg cccacaaatg tctcactgtt gtcactgcta ctggtggcac 900 gactacticg accteceaca etectgtggt cactititget ticatagtee etggggtggg 960 gaaaggtcgt cctgcggggg cccatccaaa acagggtcct caaagttccc cccaaaaaaag 1020 tettgetetg ggcaggtggt ggtagaagag cgacaggagt tggagttete agggagggag 1080 atttcacagg aggaagtgga ccaggtagca ctg 1113

```
<210> 5024
<211> 1937
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (225)...(1064)
<223> similar to gi5824388 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5024
                                                                   60
aaggagccaa gaccatggcg aaagccgggg ataagagcgg cagcagcggg aagaaaagtc
                                                                  120
taaaacggaa agccgctgcc gaagaacttc aggaggctgc aggcgctggg gatggggcga
cggaaaacgg ggtccaaccc ccgaaagcgg ctgcctttcc gccaggcttt agcatttcgg
                                                                  180
agattaaaaa caaacagcgg cgacacttaa tgttcacgcg gtggaaacag cagcagcgga
                                                                  240
                                                                  300
aggaaaagtt ggcagctaag aaaaaactta aaaaagaaag agaggctctt ggcgataagg
                                                                  360
ctccaccaaa gcctgtaccc aagaccattg acaaccagcg agtgtatgat gaaaccacag
                                                                  420
tagaccctaa tgatgaagag gtcgcttatg atgaagctac agatgaattt gcttcttact
tcaacaaaca gacttctccc aagattctca tcacaacatc agatagacct catgggagaa
                                                                  480
cagtacgact ctgtgaacag ctctccacag ttataccaaa ctcacatgtt tattacagaa
                                                                  540
                                                                  600
gaggactggc tctgaaaaaa attattccac agtgcatcgc aagagatttc acagacctga
                                                                  660
ttgttattaa tgaagategt aaaaccccaa atggacttat tttgagtcac ttgccaaatg
720
                                                                  780
gcaaggaccc cacagaacac atacctgaaa taattctgaa taattttaca acacggctgg
gtcattcaat tggacgtatg tttgcatctc tctttcctca taatcctcaa tttatcggaa
                                                                  840
                                                                  900
ggcaggttgc cacattccac aatcaacggg attacatatt cttcagattt cacagataca
tattcaggag tgaaaagaaa gtgggaattc aggaacttgg accacgtttt accttaaaat
                                                                  960
taaggtctct tcagaaagga acctttgatt ctaaatatgg agagtatgaa tgggtccata
                                                                 1020
```

```
agccccggga aatggataca agtagaagaa aattccattt ataaagtact gagagaatga
                                                                     1080
tattggattt tgctgaacag gcctatcttg aactttggta aattatttt gacagaatac
                                                                     1140
tetttteaaa atggeatttg etgattteat aaacetttea egtetggaeg aattaecaaa
                                                                     1200
tgccatgaat tgccactgtg tgtttatgta gaaaatacaa ataaaagtta ttttgatggc
                                                                     1260
ttaggtttcc ttaaacttag ttctcttgtt tttgggtaac tgtgaataat taagttggaa
                                                                     1320
tcaagattca gattaacttt cctatttgca tagaacacat gagaggaata aaatggttgg
                                                                     1380
taaatattgg ctaaccettg attittatac cagattaace tiggatteec agigteigge
                                                                     1440
acagttttaa tagettaaat ggaggeeagg tttetggatg ttttaacatt etettaagee
                                                                     1500
ttcagaaggg taaaaaattt aaagcaaaat gatctaccag ggtttaaagc aaagttgcaa
                                                                     1560
attactgaag ctaatctttg cttcctgatt ttgaggtttt tggttttttg tgcccacgtt
                                                                     1620
gtggggaget ettttttace teattacatg gtgetgtagt acteceatte aggeactgaa
                                                                     1680
aacaaagtta accctataag taactcatgg atggaaaccc gtagaactta acagcctcct
                                                                     1740
cctgacctta aaagaataaa ggttcacagt ttacctttaa ttccctagca gtcttgccag
                                                                     1800
atgtatggca taaagtcatg tgagaagagt aggtggaaaa aactgtacaa acttaacccc
                                                                     1860
ttcaggtgtt cagaacagat taatatacca tgtatttaat accaataata atgcaaaata
                                                                     1920
aaacgtttca tactaag
                                                                     1937
```

```
<210> 5025
<211> 2685
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(1666)

<223> similar to gi2208839 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5025
geggeegeg eggeggetgg ggegttegeg ggeeggegeg eggegtgegg ggeegtgetg
                                                                       60
ctgacggagc tgctggagcg cgccgctttc tacggcatca cgtccaacct ggtgctattc
                                                                      120
ctgaacgggg cgccgttctg ctgggagggc gcgcaggcca gcgaggcgct gctgctcttc
                                                                      180
atgggcetca cetacetggg etegeegtte ggaggetgge tggeegaege geggetggge
                                                                      240
egggegegeg ceatectget gageetggeg etetacetge tgggeatget ggeetteeeg
                                                                      300
etgetggeeg egeeegeeae gegageegeg etetgeggtt eegegegeet geteaaetge
                                                                      360
acggcgcctg gtcccgacgc cgccgcccgc tgctgctcac cggccacctt cgcggggctg
                                                                      420
gtgctggtgg gcctgggcgt ggccaccgtc aaggccaaca tcacgccctt cggcgccgac
                                                                      480
caggitaaag atcgaggicc ggaagccact aggagatitt ttaattggit ttattggagc
                                                                      540
attaacctgg gagcgatcct gtcgttaggt ggcattgcct atattcagca gaacgtcagc
                                                                      600
tttgtcactg gttatgcgat ccccactgtc tgcgtcggcc ttgcttttgt ggtcttcctc
                                                                      660
tgtggccaga gcgttttcat caccaagcct cctgatggca gtgccttcac cgacatgttc
                                                                      720
aagatactga cgtattcctg ctgttcccag aagcgaagtg gagagcgcca gagtaatggt
                                                                      780
gaaggcattg gagtctttca gcaatcttct aaacaaagtc tgtttgattc atgtaagatg
                                                                      840
tctcatggtg ggccatttac agaagagaaa gtggaagatg tgaaagctct ggtcaagatt
                                                                      900
gtccctgttt tcttggcttt gataccttac tggacagtgt atttccaaat gcagacaaca
                                                                      960
tatgttttac agagtcttca tttgaggatt ccagaaattt caaatattac aaccactcct
                                                                     1020
cacacgetee etgeageetg getgaceatg tttgatgetg tgeteateet cetgeteate
                                                                     1080
cctctgaagg acaaactggt cgatcccatt ttgagaagac atggcctgct cccatcctcc
                                                                     1140
ctgaagagga tcgccgtggg catgttcttt gtcatgtgct cggcctttgc tgcaggaatt
                                                                     1200
ttggagagta aaaggctgaa ccttgttaaa gagaaaacca ttaatcagac catcggcaac
                                                                     1260
```

```
gtogtotacc atgotgccga totgtogctg tggtggcagg tgccgcagta cttgctgatt
                                                                     1320
gggatcagcg agatctttgc aagtatcgca ggcctggaat ttgcatactc agctgcccc
                                                                     1380
aagtccatgc agagtgccat aatgggcttg ttctttttct tctctggcgt cgggtcgttc
                                                                     1440
gtgggttctg gactgctggc actggtgtct atcaaagcca tcggatggat gagcagtcac
                                                                     1500
acagactttg gtaatattaa cggctgctat ttgaactatt acttttttct tctggctgct
                                                                     1560
attcaaggag ctaccctcct gcttttcctc attatttctg tgaaatatga ccatcatcga
                                                                     1620
gaccatcage gateaagage caatggegtg eccaecagea ggagggeetg acetteetga
                                                                     1680
ggccatgtgc ggtttctgag gctgacatgt cagtaactga ctggggtgca ctgagaacag
                                                                     1740
                                                                     1800
gcaagacttt aaattcccat aaaatgtctg acttcactga aacttgcatg ttgcctggat
tgatttette ttteeeteta teeaaaggag ettggtaagt geettaetge agegtgtete
                                                                     1860
ctggcacgct gggccctccg ggaggagagc tgcagatttc gagtatgtcg cttgtcattc
                                                                     1920
aaggtetetg tgaateetet agetgggtte cettttttae agaaacteae aaatggagat
                                                                     1980
tgcaaagtct tggggaactc cacgtgttag ttggcatccc agtttcttaa acaaatagta
                                                                     2040
tcacctgctt cccatagcca tatctcactg taaaaaaaaa aattaataaa ctgttactta
                                                                     2100
tatttaagaa agggaggatt ttttttttt aaagataaaa gcatggtcag atgctgcaag
                                                                     2160
gattttacat aaaggccata tttatggttt cetteetgaa aacagtettg etettgecat
                                                                     2220
gttctttgat ttaggctggt agtaaacaca tttcatctgc tgcttcaaaa agtacttact
                                                                     2280
ttttaaacca tcaacattac ttttctttct taaggcaagg catgcataag agtcatttga
                                                                     2340
gaccatgtgt cccatctcaa gccacagagc aactcacggg gtacttcaca ccttacctag
                                                                     2400
tcagagtgct tatatatagc tttattttgg tacgattgag actaaagact gatcatggtt
                                                                     2460
gtatgtaagg aaaacattct tttgaacaga aatagtgtaa ttaaaaataa ttgaaagtgt
                                                                     2520
taaatgtgaa cttgagctgt ttgaccagtc acatttttgt attgttactg tacgtgtatc
                                                                     2580
tggggcttct ccgtttgtta atactttttc tgtatttgtt gctgtatttt tggcataact
                                                                     2640
ttattataaa aagcatctca aatgcgaaat ccatgaaaaa aaaaa
                                                                     2685
```

```
<210> 5026
<211> 4955
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (2859)
<223> similar to gi5689511 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5026
ctctctctt ttcgggcgga gtcgcccacc actgccagcc cagcgctggg gggacctgct
                                                                       60
ccaggetgta geegeaggae eccaeeace eccatggete ecetggeett ggtgggggte
                                                                      120
acacteetee tggeggetee eccatgetee ggggeageea ecceaaceee etecetgeeg
                                                                      180
ceteceegg ccaatgacag egacaceage acaggggget gecaggggte etacegetge
                                                                      240
cagccggggg tgctgctgcc cgtgtgggag cccgacgacc cgtcgctggg tgacaaggcg
                                                                      300
gcacgggcag tggtgtactt tgtggccatg gtctacatgt ttctgggagt gtccatcatc
                                                                      360
gccgaccgtt tcatggcggc catcgaggtc atcacgtcaa aagagaagga gatcaccatc
                                                                      420
accaaggeca aeggtgagae eagegtggge aeegttegea tetggaatga gaeggtgtee
                                                                      480
aacctcacgc tcatggccct gggctcctcc gcacctgaga tcctgctgtc agtcatcgaa
                                                                      540
gtctgcggcc acaacttcca ggcgggtgag ctgggcccag gcaccatcgt gggcagcgct
                                                                      600
gccttcaaca tgtttgtggt catcgccgtg tgcatctacg tcatcccagc cggcgagagc
                                                                      660
egeaagatea ageacetgag agtettettt gteaetgeet ettggageat ettegeetat
                                                                      720
gtctggcttt atctcatcct tgctgttttt tcccccggtg tggtccaggt gtgggaggcg
                                                                      780
```

```
etgetgacee tggtettett eccggtgtge gtggtatteg eetggatgge egacaagegg
                                                                     840
etgetettet acaagtacgt gtacaagege tacegeaceg acceaegeag eggeateate
                                                                     900
ataggegeeg agggegaeee eeegaagage ategagetgg aeggeaegtt egtgggegee
                                                                     960
gaggccccag gtgagctggg cggcctgggc ccgggccccg ccgaggcgcg cgagctggac
                                                                    1020
gccagccgcc,gcgaggtcat ccagatcctc aaggacctca agcagaagca cccggacaag
                                                                    1080
gatetggage agetggtggg categeeaac taetaegege tgetgeacea geagaagage
                                                                    1140
egegeettet acegeateea ggeeaegegg etgatgaceg gegeegggaa egtgetgege
                                                                    1200
agacacgcgg cggacgcctc gcgcagggcg gcgccggccg agggcgcggg cgaggacgaa
                                                                    1260
gacgacggcg ccagccgcat cttcttcgag cctagcctct accactgcct ggagaactgc
                                                                    1320
ggctccgtgc tgctgtccgt cacgtgccag ggcggcgagg gcaacagcac cttctacgtg
                                                                    1380
gactaccgca ctgaggacgg ctctgccaag gcgggctccg actacgagta cagcgagggc
                                                                    1440
acgctggtgt tcaaaccagg cgagacgcag aaggagctgc gcatcggcat catcgacgac
                                                                    1500
gacatetteg aggaggaega geatttette gtgeggetge tgaacetgeg egtgggegae
                                                                    1560
gcgcagggca tgttcgagcc ggacggcggc gggcggccca aggggcggct ggtggcgccg
                                                                    1620
ctgctggcca ccgtcaccat cctggacgac gaccacgcag gcatcttctc cttccaggac
                                                                    1680
egectgetge aegtgagega gtgeatggge acegtggaeg tgegegtegt gegeageteg
                                                                    174Ó
1800
ggcgtgcact acgaggacgc gtgcggagag ctggagtttg gcgacgacga gaccatgaaa
                                                                    1860
acticticagg tgaagatagt tgatgacgag gaatatgaga aaaaggataa tttcttcatt
                                                                    1920
gagetgggee agececagtg gettaagega gggattteag etetgetaet caateaaggg
                                                                    1980
gatggggaca ggaagctaac agccgaggag gaggaggctc ggaggatagc agagatgggc
                                                                    2040
aagccagttc ttggggagaa ctgccggctg gaggtcatca tcgaggagtc atatgatttt
                                                                    2100
aagaacacgg tggataaact catcaagaaa acgaacttgg ccttggtaat tgggacccat
                                                                    2160
tcatggaggg agcagttttt agaggcaatt acggtgagcg cagggggacga ggaggaggag
                                                                    2220
gaggacgggt cccgggagga gcggctgccg tcgtgctttg actacgtgat gcacttcctg
                                                                    2280
acggtgttct ggaaggtgct cttcgcctgt gtgcccccca ccgagtactg ccacggctgg
                                                                    2340
gcctgctttg gtgtctccat cctggtcatc ggcctgctca ccgccctcat tggggacctc
                                                                    2400
gesteecast teggetgeas egitggests aaggastetg teaatgetgt tgtettegtt
                                                                    2460
gccctgggca cctccatccc tgacacgttc gccagcaagg tggcggcgct gcaggaccag
                                                                    2520
tgcgccgacg cgtccatcgg caacgtgacc ggctccaacg cggtgaacgt gttccttggc
                                                                    2580
ctgggcgtcg cctggtctgt ggccgccgtg tactgggcgg tgcagggccg ccccttcgag
                                                                    2640
gtgcgcactg gcacgctggc cttctccgtc acgctcttca ccgtcttcgc cttcgtgggc
                                                                    2700
attgccgtgc tgctgtaccg gcgccggccg cacatcggcg gcgagctggg cggcccgcgc
                                                                    2760
ggacccaage tegecaccae egegetette etgggeetet ggeteetgta cateetette
                                                                    2820
gccagcctgg aggcgtactg ccacatccgg ggcttctagg gcctcgcgca gagactcgtc
                                                                    2880
eccacegeee geeegggget agggaetegg etgeacetge tettggaeee tggteteett
                                                                    2940
ttcccccag acteggeete ctctcctggg acteggeete cettctccge ecectcccet
                                                                    3000
ggetttgatt geceetgtte tgtgteecea gtageteage etteeetett eeteteggga
                                                                    3060
gcctccccgg ttcctcccct gcggtgaccc caactccage ccatcctgtt ggtgaccgtc
                                                                    3120
tatatecetg gggaaattte caceceagte ceetececag ggaaceacee ceagtaacea
                                                                    3180
tectggggag tttaaggtet eteteettgg teacceagee tggetttgee eccaaagtet
                                                                    3240
cccttcccct agtgaccccc ccccacttca ccccatgtcc cagagcctca gaacccaccc
                                                                    3300
tecetggggg accetegaag gaggetgtea gaggeegtet teagettace agecetteee
                                                                    3360
cccagecete agggagetee geteaggeee eggegggagg gagegggtgg gtgtgegee
                                                                    3420
aaggaggeeg cacacettte ettecaatee etceaetegg gttettggga ggacaeteat
                                                                    3480
tctccaggct cggagacgag gggagaagtt tggggtttca gtcccagggc ttagccggag
                                                                    3540
gaagcacatt tigaaccigc aacticagac attocagetc coccactogc cotcoactac ,
                                                                    3600
ctctgagagc ccagccacgc cttggaggga ggggcttggg tgtgtatata gtgtgtttgg
                                                                    3660
gggaggggg acccgggagg gtgcatgtct tgggaaaagg gggggacaga caacttttga
                                                                    3720
gagggcagca gactccctca gccatgagaa ccagctttgg ggaggaggcc gggaatcaaa
                                                                    3780
gegagtecag tigatetece eigacaatet ggaaggttea tittgeeete agtgeeagee
                                                                    3840
aatccgggca ggaccctcga agaggagacc gagggtccca gaggaccaat gctacaagcc
                                                                    3900
agcaaatgct gccacatctc tgccctgatg ggggtggga aatgggtggg gggatgggac
                                                                    3960
tgggcccaag ggatctgggt gggcattttt aactttggag gccttccatc tgtcggtagg
                                                                    4020
ccatctgcat tttcttactg ttgatgtttc ctgcccaaag gacacatttg ggcagtgcca
                                                                    4080
cccactcctt gggcccctag gatgacccaa ctacccccat aactttctgc ttcccacagg
                                                                    4140
ttttcagcat tctatcgtcc tgttgtgctc agccccaaca tcccagaccc gttacccact
                                                                    4200
```

```
accettetet cececagete ateateagte getgtetett ttetgtgatt tetgtaaaag
                                                                     4260
ttgccataaa actttgaaat tctgcctgaa aaacagtccc gtgggaagct gggattcagg
                                                                     4320
aggaggggc taataaggtc tctgactgag atttgggcaa ctgttaaacc aagtaatctg
                                                                     4380
ggtttttgeg geeggggte gtetgeggga cacacceaca tatageagea gegeeggggt
                                                                     4440
ccagccgcca agetetteca etegecaege ecceateagt aatgagettt caetageeae
                                                                     4500
geocecatee gteageetag etetteeact agecacacee ceatecatea gteatggget
                                                                     4560
tecacaagee acgeacetee actetecatg ecceeattgg teagtegtgg gtttecacta
                                                                     4620
accacgcccc cattcatcag ccaagctcct ccacttgcta cgcccqcatc cqtcaattac
                                                                     4680
gggtttccac taaccacgcc cccattcatc agcctagctc ttccactaat cacaccccca
                                                                     4740
ettateagte gtgetteage caegeettee tgetteagte aggggettee actageeacg
                                                                     4800
cccccatgca tgagccacaa actgtttctc tttatgggca tcctgggaac acaaaaqaga
                                                                     4860
gacgttcatt tgcctgagcc aaagagctgg ggttgatggg gtttcctaaa taaagcaagt
                                                                     4920
aattttctca gatcctagaa aaaaagcaaa aaaag
                                                                     4955
```

```
<210> 5027
<211> 900
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(898)
<223> similar to gi3548791 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5027
atggettetg etgeetgete catggaecee ategacaget ttgageteet ggateteetg
                                                                       60
tttgaccggc aggacggcat cctgagacac gtggagctgg gcgagggctg gggtcacqtc
                                                                      120
aaggaccagg teetgecaaa eccegaetet gacgaettee teageteeat cetgggetet
                                                                      180
ggagactcac tgcccagctc cccactctgg tcccccgaag gcagtgatag tggcatctcc
                                                                      240
gaagacetee cetecgacee ceaggacace cetecacgea geggaceage caceteceee
                                                                      300
gccggctgcc atcctgccca gcctggcaag gggccctgcc tctcctatca tcctggcaac
                                                                      360
tettgeteca ceacaacee agggecagtg atecaacaac ageateacet gggggeetee
                                                                      420
tacctcctgc gacctggggc tgggcactgt caggagctgg tgctcaccga ggatgagaag
                                                                      480
aagctgctgg ctaaagaagg catcaccctg cccactcagc tgcccctcac taagtacgag
                                                                      540
gagcgagtgc tgaaaaaaat ccgccggaaa atccggaaca agcagtcggc gcaagaaagc
                                                                      600
aggaagaaga agaaggaata tatcgatggc ctggagactc ggtcctgttg ctgtcctttg
                                                                      660
eceteateat ecteeetee ateageeett ttggeeecaa caaaacegag ageeetgggg
                                                                      720
actitgcgcc tgtacgagtg ttctccagaa ctttgcacaa cgatgctgcc tcccgcgtgg
                                                                      780
ctgctgatgc tgtgccaggc tccgaggccc caggaccccg acccgaggct gacacaaccc
                                                                      840
gagaagagte teeaggaage eeeggggeag actggggett eeaggacace gegaacetga
                                                                      900
```

```
<210> 5028
<211> 683
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (41)...(109)
<223> similar to gil62191 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5028 tttcgtcaga gctgcgcgtg ctgctttgcc cgagcccgag cccgagcccg agcccgagcc 60 cgagcccgag cccgagcccg agcccgaacg caagcctggg agcgcggagc ccggctaggg 120 actectecta tttatggage aggeaceeaa catggetgag ceeeggggee cegtagaeea 180 tggagtccag attcgcttca tcacagagcc agtgagtggt gcagagatgg gcactctacg 240 tegaggtgga egacgeceag etaaggatge aagageeagt acetaegggg ttgetgtgeg 300 tgtgcaggga atcgctgggc agccctttgt ggtgctcaac agtggggaga aaggcggtga 360 ctcctttggg gtccaaatca agggggccaa tgaccaaggg gcctcaggag ctctgagctc 420 agatttggaa ctccctgaga acccctactc tcaggtcaag ggatttcctg cccctcgca 480 gagcagcaca tetgatgagg ageetgggge etactggaat ggaaagetac teegtteeca 540 600 ctcccaggcc tcactggcag gccctggccc agtggatcct agtaacagaa gcaacagcat gctggagcta gccccgaaag tggcttcccc aggtagcacc attgacactg ctcccctgtc 660 ttcagtggac tcactcatca aca 683

```
<210> 5029
<211> 4235
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4236)...(940)
<223> similar to gi5689527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5029
tttgaacact gcaaaaggct tttattttat aggcaccact gcaaaatgag qaatcacatc
                                                                       60
aaaacatatc aaatagaaaa taataattta ttttaacttc attttactgt ttgtaactaa
                                                                      120
tcatgatttt gtgaacttgc ctgtataagt ctgtaccttc aaatctacaa agcaaaagtt
                                                                      180
tactacaatg agcacttaaa attccacaaa ccgtctccat ccacaacttt cctgtacatg
                                                                      240
caaattettt cagtgggetg caatatttge aaacatgett taaaetteca taaagatgea
                                                                      300
agatattttg ctttctgcta aaacctttac actctcttgg gaaccttaac caggaaaatg
                                                                      360
tttaaatgta tatcccaact ctaaacgctg ccggtttggt tatatgtatt aaatcgttaa
                                                                      420
ccaccgggtt gggtggtttt gagttgaaac cttcacctaa atgataatat cttaacggtc
                                                                      480
acgcatatga aacacattca gtaacgtacc attataaaat agggttccat taaaaataca
                                                                      540
tactggcagt tgtatttgtg ttttaggcag gaaaaaaagc gtgtttaact tttttatatg
                                                                      600
aatatagttt aaacaagtta ttotgtgaaa gtatgottaa taaaaqatot ttotqaaatt
                                                                      660
taaacacttt atgtaaaagg gtacaggtag aaaagtacaa ttgctatttg aaaaaagctc
                                                                      720
tgtttgttaa tattgeette caagatagta agggtgtttt tetetetett eeettaaaat
                                                                      780
agacctatga cacccagagt tgtagggttt gcaaatttgg actataaaca tgaagaccgt
                                                                      840
```

```
900
 acttatetta tatacaaaaa ettgeegeat tgaacgaqqe aggaatttet acceeagtgg
                                                                       960
 tagtggtctc ctttatgtac ataatgcaga agtgaaaatt atacagtagt caccgatagg
                                                                      1020
 aaggaattgt atactetagt geegteeggg gattttgtge egtgggttaa gagttettgg
                                                                      1080
 atogtoatoc agttatogaa gattttotta ttootottot toatoatott tttgtggoto
 agttcgagaa tgttcatctc cttcctgtca tcggctgctt gctgctcctt gagacaatcc
                                                                      1140
 aacctgctct gcatcatgaa ctcgcgccgc cgccgctgct ccttggcctt caccaggtgc
                                                                      1200
 tgetteetet ceteettget ceagtagege cecatettea tetegeteae egegtegteg
                                                                      1260
 teggtggtea tgeegetgeg etetteeegg atetteaggg egegeteeeg cageaggegg
                                                                      1320
 tecegeaegg geetettggt gatgtagege gtecegtege tgeggatett cacettecae
                                                                      1380
 tecatgegeg geteegaegg ggtgggagag eteaggteet tgeacatget caccaggete
                                                                      1440
 atotggottt gegegtacte caeggeegae ttetgetgga teagetgeat gtagetetgg
                                                                      1500
 tagtgctggg cgtgcgccgg gatgtgcgcg tgcttgtatg gggagtggtg ataggagggc
                                                                      1560
 aggtaggege tgeceagett etggetggge gtggggetee ggeteeegte getggetete
                                                                      1620
 cgctctttgc tttccagggg ctggttgggg tccagctcct tcagggacgg gctataggta
                                                                      1680
 ggggtgccca cttcgggatc ttccgtgatg gagagcagat tcttggaggc tggcccgtag
                                                                      1740
 getteegtgg teeceacage ecettegetg etegggeage tgatgeeete egeegetete
                                                                      1800
 ctcaaggagt tgtcggggga gatctccagg gtgagcgggg tgctgcggca gctctcgcct
                                                                      1860
 gtgttgtagg cgctcgagct gtccttgtcg gatttctccg ggagctcggt gatatctgag
                                                                      1920
 agetegtgte tgegeaegte gatgetggtg ttgtagttge ggaageeget gttgtgeage
                                                                      1980
 atccaggact cgcggtactg ctccttgagc tgctgcatct tgtgggcgcg cacgatgctc
                                                                      2040
 aggeacteca getegatget gegeagetet tegtteagea geteeagete ettgtecaeg
                                                                      2100
 etetcagggt cactettgec ggcgtecagg gggccgctag ggtagtacag gccgtaaggg
                                                                      2160
 gtggcgctct tcacctggca cttgagctcc aggagctcgc ggaagcgctc gcactcgtcc
                                                                      2220
 acceggatee ccaggtagge ggegeeegtg cactegggeg aaatgaacga ettgttgetg
                                                                      2280
 aagggcaggt cgccgctgcc caaggtgtcc tggctgcagg tgagcttcct ctgccccgcc
                                                                      2340
 agegggttgg aggatgeggt ggegtegteg ceattgttet ettgeteega getetegtea
                                                                      2400
 ttacgggtgc tetegteggt cegececaca cegetgteet tetegtgetg gttggacaag
                                                                      2460
 atggtggctg tatctgtggt cocaccgtct tegtegtgct tettetgetg cageaegeta
                                                                      2520
getgtgaatt geatggeetg gtggtgetge teetecagea tgtecatgtg caggteatee
                                                                      2580
 agaaagtegt teetgteate atecateeag ceeteateea getggagtte ageeettgea
                                                                      2640
 atcagcaatg aaaagttttt attttcttca ctggttagaa gagccacagc ctcttcacgg
                                                                      2700
 ttctgcacct ctatcccatt aatctggata atgcggtctc cttctcggat gcgcccatcc
                                                                      2760
 ttggctgcaa tgctgttagg gtcaatctca ctgatataaa tcccaatgtc gtcttcatcq
                                                                      2820
 teegteeggt ageacacagt gaggeecage ttgteetgge tgtteattet gtagaggtee
                                                                      2880.
 acttecteca getecagete etecetgtee atetectgat ggatgtetee aatgtagtea
                                                                      2940
 tttggatcgt agtattcatg ggctgaggga tgctcctctg gcaagagata gggatccagc
                                                                      3000
 acgggtgggc tgggagagga catcttagtg agggccatga tatgttcaaa ggtgatgtcg
                                                                      3060
 gtttgggttc ccgtgtccac cagctgagac tctgatggag gcgtgaacat tttggtcctt
                                                                      3120
 ggtgttcttc tcaacacctg caccactatg ggctccttgg ctgtcttgaa agcttccaca
                                                                      3180
 gcctggtcat gagttgctct ggataagtct ctgccgttga cctcaataat cctgtcatga
                                                                      3240
 atttgcagge etectteett ggetgeägge ecaetgteäa etatettgga tacaaagatt
                                                                      3300
 cetteactgg atgatecate gtggttatec acaeteggee ggecaceaat aatattgaat
                                                                      3360
 cccagggage eggagteeeg atgeaggaea agagteagae ttttggttte ttegeeettg
                                                                      3420
 ccgccgggcg gcgcggccac gcagcggctg agcgagtcga ggcgcgcgct gtattcggtg
                                                                      3480
 aatttettet ggtagegeag egeggteate tgeageteaa getgegeege ggeeagetgg
                                                                      3540
 gccaccageg acticitegeg etteccageg egcagegeet cettetigag egcettqtqc 3600
 agegegeeca ggegggeetg gagegegeeg ttgtgegeee geagegeteg egegeageag
                                                                      3660
 tggccgcccg cgcgctgctc gccgtgcgtc aagggtagcc cgcagccctc ctggcagcgg
                                                                      3720
 eccactggcc gcgcgtcgca cgcgtcgcgc atgtgcgcct ccacgtcgcg ccgcagcagc
                                                                      3780
 acctggccgc aacccgcgtg gcgacagcgc gcgggcgcga agtcgcagcg ctcgaggtgc
                                                                      3840
 teeggeaget getgeagett gaccaccegg cegeageege gegtegegta egegeaettg
                                                                      3900
 atgtccagct tgaggataag gcgcttgagc ggcaggacgt ggttgagctc tttggccgac
                                                                      3960
 aggcgaccgc ggcagcgcc cgggcagctg ccctcctgca ccacccaggg cagcacgcag
                                                                      4020
 ccggcgcaga agacgtggcc gcacggcgtg gtcagcgggt cctccaggac cttgtggcac
                                                                      4080
 agegegeact teaggteegg greeaegteg eegregaage ggreeagere gaagecearg
                                                                      4140
 gtggcggcca ggccccgggg tcgccgccgg gcggccgggc gccccctccc tccccacgag
                                                                      4200
 gcggcccaga caggccggct acgccgcccg cgcgc
                                                                      4235
```

```
<210> 5030
<211> 4226
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2513)
<223> similar to gi3882233 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5030
gccataacgg agacctatac ttctccaacg tgatgctgca ggacatgcag accgactaca
                                                                       60
gttgtaacge eegetteeae tteacecaea ceatecagea gaagaaceet tteacectea
                                                                      120
aggteeteae caccegagga gttgeagaaa gaacaccaag etteatgtat eeccagggea
                                                                      180
ccgcgagcag ccagatggtg cttcgtggca tggacctcct gctggaatgc atcgcctccg
                                                                      240
gggtcccaac accagacatc gcatggtaca agaaaggtgg ggacctccca tctgataagg
                                                                      300
ccaagtttga gaactttaat aaggccctgc gtatcacaaa tgtctctgag gaagactccg
                                                                      360
gggagtattt etgeetggee teeaacaaga tgggeageat eeggeacaeg ateteggtga
                                                                      420
gagtaaaggc tgctccctac tggctggacg aacccaagaa ccttattctg gctcctggcg
                                                                      480
aggatgggag actggtgtgt cgagccaatg gaaaccccaa acccactgtc cagtggatgg
                                                                      540
                                                                      600
tgaatgggga acctttgcaa tcggcaccac ctaacccaaa ccgtgaggtg gccggagaca
ceatcatett cegggacace cagatcagea geagggetgt gtaccagtge aacaceteca
                                                                      660
acgageatgg ctacctgctg gedaacgeet ttgtcagtgt getggatgtg cegeetegga
                                                                      720
tgctgtcgcc ccggaaccag ctcattcgag tgattcttta caaccggacg cggctggact
                                                                      780
gccctttctt tgggtctccc atccccacac tgcgatggtt taagaatggg caaggaagca
                                                                      840
acctggatgg tggcaactac catgtttatg agaacggcag tctggaaatt aagatgatcc
                                                                      900
gcaaagagga ccagggcatc tacacctgtg tcgccaccaa catcctgggc aaagctgaaa
                                                                      960
accaagteeg cetggaggte aaagaeeeea eeaggateta eeggatgeee gaggaeeagg
                                                                     1020
tggccagaag gggcaccacg gtgcagctgg agtgtcgggt gaagcacgac ccctccctga
                                                                     1080
aactcaccgt ctcctggctg aaggatgacg agccgctcta tattggaaac aggatgaaga
                                                                     1140
aggaagacga tttcgtgacc atctttgggg tggcagagcg ggaccagggc agttacacgt
                                                                     1200
gtgtcgccag caccgagcta gaccaagacc tggccaaggc ctacctcacc gtgctaggac
                                                                     1260
ggccagaccg gccccgggac ctggagctga ccgacctggc cgagaggagc gtgcggctga
                                                                     1320
cetggatece eggggatget aacaacagee ceateacaga etacgtegte cagtttgaag
                                                                     1380
aagaccagtt ccaacctggg gtctggcatg accattccaa gtaccccggc agcgttaact
                                                                     1440
cagccgtcct ccggctgtcc ccgtatgtca actaccagtt ccgtgtcatt gccatcaacg
                                                                     1500
aggttgggag cagccaccc agcctcccat ccgagcgcta ccgaaccagt ggagcacccc
                                                                     1560
ccgagtccaa tcctggtgac gtgaagggag aggggaccag aaagaacaac atggagatca
                                                                     1620
egtggaegee catgaatgee aceteggeet ttggeeceaa cetgegetae attgteaagt
                                                                     1680
ggaggcggag agagactcga gaggcctgga acaacgtcac agtgtggggc tctcgctacg
                                                                     1740
tggtggggca gaccccagtc tacgtgccct atgagatccg agtccaggct gaaaatgact
                                                                     1800.
tcgggaaggg ccctgagcca gagtccgtca tcggttactc cggagaagat tatcccaggg
                                                                     1860
ctgcgcccac tgaagttaaa gtccgagtca tgaacagcac agccatcagc cttcagtgga
                                                                     1920
accgcgtcta ctccgacacg gtccagggcc agctcagaga gtaccgagcc tactactgga
                                                                     1980
gggagagcag cttgctgaag aacctgtggg tgtctcagaa gagacagcaa gccagcttcc
                                                                     2040
ctggtgaccg cctccgtggc gtggtgtccc gcctcttccc ctacagtaac tacaagctgg
                                                                     2100
agatggttgt ggtcaatggg agaggtgatg ggcctcgcag tgagaccaag gagttcacca
                                                                     2160
ecceggaagg agtacceagt geceetagge gttteegagt eeggeageee aacetggaga
                                                                     2220
```

```
caatcaacct ggaatgggat catcctgagc atccaaatgg gatcatgatt ggatacactc
                                                                     2280
tcaaatatgt ggcctttaac gggaccaaag taggaaagca gatagtggaa aacttctctc
                                                                     2340
ccaatcagac caagttcacg gtgcaaagaa cggaccccgt gtcacgctac cgctttaccc
                                                                     2400
tcagcgccag gacgcaggtg ggctctgggg aagccgtcac agaggagtca ccagcacccc
                                                                     2460
cgaatgaagg taggtgcatg gcagcagccc ctggggtaaa aggtcccagc taattccgag
                                                                     2520
gcctagagaa acactgagat ctgtagctgg ctgcctggga tggagaggaa atgagacttg
                                                                     2580
caagtcctca agccctcgga aggtgagaac ccatcttatg tgtgagaggt aggtgctggc
                                                                     2640
attgtatctg gageteaget eteettggae eaetgtggte acaeetgggt eeecaettge
                                                                     2700
cctgacttgc tcagtcactt gacatctatc atctttcctt cttgtagagg aataaggaag
                                                                     2760
agagcatgag ttgagaaatg agagaaatca taatgaactc caaagaacag tgagtgttca
                                                                     2820
cctcttgagg gaggcaggaa tatgattgtg agtgctccca tgagggctct ggggacaacc
                                                                     2880
ttetttette gaaggeacat gggtteaagg aggtagggga aacegteagg atgacgetgt
                                                                     2940
tactggcatc atgagtagag cagagaatgt ggtccttcct tgcagcctga attggatgcg
                                                                     3000
ttgtcaggct gcagagagga ggaggagtta ggaaacagcc atttgccaag ccagcttcac
                                                                     3060
aaagagcaaa tgagttcatc acctgggtcc aggcgtcatc tggcagcatt tcagcccac
                                                                     3120
cagagetgea cetgeetgag gaeteeacta gagggggete caggeteace egeacaegea
                                                                     3180
ctggcatcag gggaatgtgc agtctgggac ctctcgagga ggcaaggctg caaaagcctc
                                                                     3240
aatactggca caccetetgg gaaaggetgg ggaccecegt gtgtetecag agatacaatg
                                                                     3300
gtotattoaa cagocattto ttgagtacco acaatgtgag gtgccagaca ctgccacaca
                                                                     3360
caagggatat acaaaggtaa caagaagctc acaccatcta gagggggagt catctataag
                                                                     3420
aatatctaat tgcatgtcta aatgaggggg cgcagtggct gggcagagaa ggggattcag
                                                                     3480
tetteaeggg aagaeteeag agaagaggtg atgtgagtgg geaetetgga agetgacaag
                                                                     3540
teategtgte tggtgettte cacagaaggg teaggteeeg tggeetggee caggeecaga
                                                                     3600
eggggtette tgaataceae eectaceege attecaggag agcateagtg etgeettete
                                                                     3660
tggggctacc aggcccgctg cgtcaccccg ggatcccagg cagettcaca agetgcccac
                                                                     3720
atcettecce ageceaceae tetagecagt agaceagege tgaggeagga gaagaggge
                                                                     3780
caggcagaag cagagaaagg ctgacagccc gctctgcatc cctctctggt ctcagaaacc
                                                                     3840
aggagtgagt cacacaacca gctctccctc ctgctgtgct cttctgcact ctcccaagcc
                                                                     3900
ectgggcact egggaagttt attagggcag ggggacttag gttagtgget gatgtgtgte
                                                                     3960
tgtcaccaaa ggccaggcca ggccaggcca tgatgcactt tcttgattac tcaattctgc
                                                                     4020
aaatagatag ataaagagag ccccttcttc cctccctatg tgcaccccaa tacagaacat
                                                                     4080
cagataacaa agccctattg tccagcccca gtaaccacca cagagaatgt tctgcagccc
                                                                     4140
caggggacaa aaggacaaat agaggctttt ttcttaactt agggctttgc agaaaattca
                                                                     4200
agaatttcac ttagggctct cagtcc
                                                                     4226
```

```
<210> 5031
<211> 1208
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1210)...(557)
<223> similar to gi4850326 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5031
atctacacct ccccaagac atcagggaca aagtggggtg gagtgagatg gggaaggaga 60
agaaggtata gaagactcca agggtcttct ttaaaggtac cctggtactc agttaacaat 120
tcctcccagg cagctagctc ctgtgagtgc caaagacaat ggaaaagagg aagggggggg 180
```

```
cggagggagg gagggagaag gaggggctgg gaaggcattc aagcagctgc agtttccgga
                                                                      240
tatgtgtcca catctgtgtt ctgtcttctg aaaaagaaaa atttcccccc aaaccacacc
                                                                      300
ctgcccctgc attgtctgtt tgacacaaag tttcaggacc ctgaaaaaaa gccccaaagt
                                                                      360
gcttcttcat catcttgggg aatacagggt acgtggtggt ggtctctgta ttttccgaag
                                                                      420
                                                                      480
ctgggggtag ggagtgggca gactagcaag gtcagcctca ggaggctaaa acctctgacc
ttgctgcagt cttcttagat gtcagaagag aaccaggttt ccaggcagag cactggggct
                                                                      540
tegacacaaa etgteagaaa ggettgtegg geetgetggt ettggeatee eegetggetg
                                                                      600
etttgcagat gacgetgtte gtgtgettge ageggeaace agggeggege agacggtegt
                                                                      660
agccacgctg ggccagcttc acgcagccgg tggcaggcag gtagcagagc aggcagggca
                                                                      720
gcaccacgga gagagcaccc atgaaggacc agcgggcgca gcagttggag cgggagcagg
                                                                      780
agcaggggtg gtcagcgcag gagccctcat cgtcctcatt cgtgcagtgg tagaagatgc
                                                                      840
ectgeaceaa acacatgeae gigecatagt tgaccagagt etgggetgag cacaggeaet
                                                                      900
cctggttgca gacccagcag gaaggcaacg tccgggggga tgcacactcc ttgcatttac
                                                                      960
actteccaea ggeetegeae ageaagaagt gettgteeag etegggtggg aeegeeggge
                                                                     1020
cettgaggte cageggetgg cagtggacca cettgggetg gatgegeaca gecettggtg
                                                                     1080
aggcctggtc agccacgggt ggtggtgcca tgtggtctaa gagccgttgg tcagaggatg
                                                                     1140
tgetgetget getgeteaca gagetgggge gecegetgaa ggagatecaa tggtgggtga
                                                                     1200
catcctgg
                                                                     1208
```

```
<210> 5032
<211> 1959
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1916)...(1208)
<223> similar to gi3413920 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5032
ccttgagact cgacatccag agttttttgt ggcctagtga tgtaggcact cttctgccac
                                                                       60
acaaccaatg gtgattactg aaattccaaa ctcctgaaaa gagctatcgg cccagtggtt
                                                                      120
tettttagaa ggeegttigt giggeaceaa aaageaatig etteeteeat teetactace
                                                                      180
tggaaacaca aacttttaaa ttcatgccag ttcaattgga acagtagcaa atttcatgaa
                                                                      240
gcagctaaaa agaagagcaa cagctggtac atcaggcatt aataatataa caaaggaaga
                                                                      300
aaaaagagaa atttttcatt agtacttttt gatgtcaatt tattatttat ccctttgcca
                                                                      360
gtattcaaac agacaggcag tcataaaaca ttaaaaaaga tcctttaaaa cggtcaggca
                                                                      420
tetgttttae eteagtteet ttttagaaae etggaaatea ggageeeegg ettttatget
                                                                      480
atagcaagtt tgacacttgc tgtatcaaaa atattgcttg aggatcacta cgtagaaaga
                                                                      540
gttttgttta aaattttatg aaaggctggt taggcaggca gacaatggtt tctaaggcaa
                                                                      600
gatccagtgt aaatcaggca atgtgctgtt teccaactgt ttgactcctc agttcatatt
                                                                      660
ctgaaaccgg ggggcgtttg acaaaaccca ctgtttcagt taattaggca tcctgtcaaa
                                                                      720
tetttecaat caaggactag geatgetgea cetggteeta ggtttaaaaa acacattgtg
                                                                      780
99999caatt ctgatgtgac cctcaggggc ccgctggcca tgctcagaac tqqcattcag
                                                                      840
cgtgcatgcc ataattacca tccacacaaa ataagtagac ctccttgtcc agcagctctg
                                                                      900
agagattetg ectaateeta atgacetgee acaceatttt aacttetttg ataaatgtet
                                                                      960
atcettgtga tttagacett teeteteetg taaagaaggt atctetteet gggacagaag
                                                                     1020
actecteaga agtagaatea etgtagaaat aaagcaaatg aaaaatggag aagcaaaaac
                                                                     1080
caaagtaaaa cagaagcctt aacagccctc tccccagcag gagcttgttg gaggaggtgt
                                                                     1140
```

```
gggtgctgag teeceeetee etagettgte ttgeeeteag tgetetgggt gettttgeet
                                                                    1200
ttccaggtac tgcccttggt gtagaggcca tggtccttga tgtacgtgat gacagcatcg
                                                                    1260
ggaatcaggt actttacget ctgcccttgg cccaaggete geetgatgta tgtggcaetg
                                                                     1320
atctcattct gcacaggctc cttggccagg tgaatgttgt gctggtgcat ccgtaggatg
                                                                    1380
ggagattetg egatgtaace ttttgggteg tgacetaete ggeecaegea caccaageca
                                                                    1440
aacttctcca ctatttcctg gatgtgcgca tccttccaga ggttgggggt ctggaaggtc
                                                                     1500
                                                                    1560
ttcaagacgt ctgccccaca gagaagette ageteaggea cagetgcagg ggtegagaag
agtgeettge catggtetgg geetteeate tggggtggag atetgageag tttgetgtga
                                                                     1620
tgatgeetea geacetteae tgteteeate caetgtgeet geteaetete ecaagggtee
                                                                     1680
                                                                    1740
accoggatoc agtoggatgt otgoagggoo agoogggooa tggocactog gtgatgagaa
gctgcgaggt ctttcttccc ataggtgtcg ttgacaggag agatgatacc ctggatgacc
                                                                     1800
tggtacattc ctgtttggtg taggtgatct ctggccacct caaacatgcg caggtgcatg
                                                                    1860
ttggtgatgg ggttaaagga gccacaggcc aggagcacca caggtattcg gctcttcatc
                                                                    1920
ttgtcaggca catccacacc tgttgcagtg caagtgcaa
                                                                     1959
```

```
<210> 5033
<211> 498
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(143)

<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5033
ttttttttt ttagtagaga tggggttttg ccatgttggc cagggtggtc tcacactcat
                                                                       60
aggeteaagt aatetgeeeg eeteageete caaaagtget gggattacag gegtgageea
                                                                      120
ctgtgcccgg cctgacttca aatcctgtgt tgaatagaag tagtgagagc gggcatcctt
                                                                      180
ctcttgttcc tgatcttgga ggcaaagatt tcagtctttc atctaaaatg actgaaagac
                                                                      240
tttcagccat gggccttgca tgactggcct ttattttgtt gcagtatatt ccttctcttc
                                                                      300
ctggtttgtg gagtgtttta ccaggaaagg gtgttcaggc tgggcacagt ggctcaaqtc
                                                                      360
acacaaaagt gtcaagtcag ccctgcccaa gggccccagt gcccatcttc ctgctgaggg
                                                                      420
gctgggcctc accttggctg gctgggcccc tcccacctgg atccctgcag accccaccgc
                                                                      480
actcagcctc acacgaaa
                                                                      498
```

```
<210> 5034
<211> 1349
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1351)...(332)
<223> similar to gi687827 in the genepept database release 114,
```

## Run with FASTXY 3.3t00, default parameters

```
<400> 5034
ggcagtctgc tgacccttgg aagatgaagg agaaatggga gaaggcagag gggtcaggtg
                                                                       60
ggggctgcca gaggaagcgg ccctgagctg ctggttccca gtccctccct cataagcaaa
                                                                      120
gctgaggccc tcaggttacc acgggacact gttaagttta ttctagggtg agtgggtgcc
                                                                      180
caaggggggc agtgagtatg gccgaggtca cctggtggca gggtgctcag ggatggccac
                                                                      240
aggttetata gggccctgca gggcctgagt ctctagtcag ttgggatgct tcaccttctg
                                                                      300
                                                                      360
ccccaccca agggggttgg ggcagtcatg gatgtagtag ttttcgtaat tcgcagggat
cagtgatggg cactgagcag gcttgattct cacacacata tgcagtggcc tggtcttcca
                                                                      420
                                                                      480
accytcygag gytactcagy aaagycayct gycygyacay gaayctcyay gygtccccat
cagccagaat cagcaccttg ttaggaatgt agacagagtg gacgcactgc accagggcct
                                                                      540
tggtgtcctt ggcctgacgg tctccacaga tcacgatctg cttgagggtc tgctgctggg
                                                                      600
ctgagagggc gcggaccatc tcgggcaacg ccaccgggac acgacgcatg cgctcggaaa
                                                                      660
aggeggteaa taggeaeaca caettgteea tecagteett gtggeeegtg aageeatgea
                                                                      720
gccggagcag gttgtgggct gacacggaat tggcgctggg ctctgctcca tcctggtcgt
                                                                      780
cetteagacg caggggcagg ccagececca geteageete aetgeagaag tageegeeae
                                                                      840
cctgggagtc ccaaaagagc ctgtcctgtg tgtcctgcag ccgcagagcc cactcgagcc
                                                                      900
acgcactote etgigaggee teatacaggt ceageaggee eegeaceaeg aaggegtagt
                                                                      960
cctccaggaa gccccagcag ggtgggttgc tgtgctccac agtcccccca gggccggtgt
                                                                     1020
agcaggteeg cateaggegg ceaetggeea cateaaacat gtgeegette aggaaettgg
                                                                     1080
caccattggt ggcatagttg atcagcctgt cttggcccag gacagcccca gtcacagcat
                                                                     1140
agectgacae cateaageca ttecaggeag ceageatett getgtecagg tgeggettgg
                                                                     1200
gccgatgett ccgggcctgg aagagettet ccagecetga attgageaag gteegeaegg
                                                                     1260
cctccacatc caagccaaag cgggcagcag tcagctccag cgagtaccgg acggtcagca
                                                                     1320
cattetggcc ctgcagetec ceettgggg
                                                                     1349
```

```
<210> 5035
<211> 1911
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1912)
<223> similar to gi3882283 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5035
gagccatcca tcggggagtt taatgagcag gttctgcgac tgatgcacag ccttggaata
                                                                       60
gatcagcaga aaaccattga gtotttgcag aacaagagct ataaccactt tgctgccatt
                                                                      120
tatttettgt tggtggageg cetgaaatea eateggagea gttteeeagt ggageagaga
                                                                      180
ettgatggcc gccagcgtcg gcctagcacc attgctgagc aaacagttgc caaggcacag
                                                                      240
actgtggggc teceagtgae catgeattea eegaacatga ggetgetgeg atetgeeete
                                                                      300
ctcccccagg catccaacgt ggaggccttt tcatttccag catctggctg tcaggcggaa
                                                                      360
gctgcattca tggaagaaga gtgtgtggac actccaaagg tcaatggctg tctgcttgac
                                                                      420
cctgtgcctc ctgtcctggt gcggaaggga tgccagtcac tgcccagcaa catgatggag
                                                                      480
```

```
540
acctccattg acgaagggct ggagacagaa ggagaggccg aggaagaccc cgctcatgcc
                                                                      600
tttgaggcat ttcagtccac acgcagcggg cagagacggc acactctgtc agaagtgacc
                                                                      660
aatcaactgg tegtgatgee tggggeaggg aaaattttet ceatgaatga cagecectee
                                                                      720
cttgacagtg tggactctga gtatgatatg gggtctgttc agagggacct gaactttctg
gaagacaacc cttcccttaa ggacatcatg ttagccaatc agccttcacc ccgcatgaca
                                                                      780
tetecettea taageetgag acetaceaae eeageeatge aggetetgag eteceagaaa
                                                                      840
cgagaggtcc acaacaggtc tccagtgagc ttcagagagg gccgcagagc atcagatacc
                                                                      900
tccctcaccc agggaattgt agcatttaga caacatcttc agaatctggc tagaaccaaa
                                                                      960
ggaattctag agttgaacaa agtgcagttg ttgtatgaac aaataggacc ggaggcagac
                                                                     1020
                                                                     1080
cetaacetgg egeeggegge teeteagete caggacettg etageagetg ceeteaggaa
gaagtttete ageageagga aagegtetee acteteeetg ceagegtgea teeceagetg
                                                                     1140
tececaegge agageetgga gacceagtae etgeageaea gacteeagaa geceageett
                                                                     1200
ctgtcaaagg cccagaacac ctgtcagctt tattgcaaag aaccaccgcg gagccttgag
                                                                     1260
cagcagctgc aggaacatag gctccagcag aagcgactct ttcttcagaa gcagtctcaa
                                                                     1320
ctgcaggcct attttaatca gatgcagata gcagagagct cctacccaca gccaagtcag
                                                                     1380
cagctgcccc ttccccgcca ggagactcca ccgccttctc agcaggcccc accgttcagc
                                                                     1440
etgacecage ceetgagece egteetggag cetteeteeg ageagatgea atacagecet
                                                                     1500
ttcctcagcc agtaccaaga gatgcagctt cagcccctgc cctccacttc cggtccccgg
                                                                     1560
getgeteete etetgeeeae geagetaeag cageageage egecacegee accaceceet
                                                                     1620
ccaccaccac gacagocagg agetgeecca geceettae agtteteeta teagaettgt
                                                                     1680
gagetgeeaa gegetgette eeetgegeea gaetateeea etceetgtea gtateetgtg
                                                                     1740
gatggagece ageagagega cetaacgggg ceagactgte eeagaageee aggactgeaa
                                                                     1800
gaggeeeet ecagetaega eccaetagee etetetgage tacetggaet etttgattgt
                                                                     1860
gaaatgctag acgctgtgga tccacaacac aacgggtatg tcctggtgaa t
                                                                     1911
```

```
<210> 5036
<211> 1976
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (8)...(1108)
<223> similar to gi3560166 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5036
 tttcgtcaag agtggagatg acccaccggc catgagacag ggcagtgagc acacgtatga
                                                                        60
 gagetgtggt gaeggagtee eageeeegea gaaagtgett tteeeeaegg agegaetgte
                                                                       120
 tetgaggtgg gagegggtet teegegtggg egeaggaete cacaacettg geaacacetg
                                                                       180 ·
 ettteteaat gecaceatee agtgettgae etacacacea eetetageea aetacetget
                                                                       240
 ctccaaggag catgetegea getgecaeca gggaagette tgcatgetgt gtgtcatgea
                                                                       300
 gaaccacatt gtccaggcct tegecaacag eggcaaegec atcaageceg teteetteat
                                                                       360
 eegagaeetg aaaaagateg eeegaeaett eegetttggg aaceaggagg aegegeatga
                                                                       420
gttcctgcgg tacatttttt ttgccatgca gaaagcctgc ctgaatggct gtgccgggtt
                                                                       480
ggatcgtcaa acgcaggcta ctaccttggt ccatcaaatt tttggagggt atctcagatc
                                                                       540
 acgegtgaag tgeteegtgt geaagagegt eteggaeace taegaeeeet aettggaegt
                                                                       600
cgcgctggag atccggcaag ctgcgaatat tgtgcgtgct ctggaacttt ttgtgaaagc
                                                                       660
 agatgteetg agtggagaga atgeetacat gtgtgetaaa tgeaagaaga aggtteeage
                                                                       720
 cagcaagege tteaceatee acagaacate caaegtetta accettteee teaagegett
                                                                       780
```

```
tgccaacttc agcggggga agatcaccaa ggatgtaggc tatccggaat tcctcaacat
                                                                      840
                                                                      900
acgtccgtat atgtcccaga ataatggtga tcctgtcatg tatggactct atgctgtcct
                                                                      960
ggtgcacteg ggctacaget gecatgeegg geactattae tgctacgtga aggcaagcaa
tggacagtgg taccagatga atgatteett ggtecattee ageaaegtea aggtggttet
                                                                     1020
gaaccagcag gcctacgtgc tgttctatct gcgaattcca ggctctaaga aaagtcccga
                                                                     1080
                                                                     1140
gggcctcatc tecaggacag getectecte cettecegge egecegagtg tgattecaga
                                                                     1200
tcactccaag aagaacatcg gcaatgggat tatttcctcc ccactgactg gaaagcgaca
                                                                     1260.
agactetggg acgatgaaga ageegeacae caetgaagag attggtgtge ecatateeag
gaatggctcc accetgggcc tgaagtccca gaacggctgc attectccaa agetgccete
                                                                     1320
ggggtcccct tcccccaaac tctcccagac acccacacac atgccaacca tcctagacga
                                                                     1380
                                                                     1440
ccctggaaag aaggtgaaga agccagctcc tccacagcac ttttccccca gaactgctca
ggggctgcct gggaccagca actcgaatag cagcagatct gggagccaaa ggcagggctc
                                                                     1500
ctgggacage agggatgttg teetetetae eteacetaag eteetggeta cagecaetge
                                                                     1560
                                                                     1620
caacgggcat gggctgaagg ggaacgacga gagcgctggc ctcgacagga ggggctccag
cageticeage ceagageaet eggeeageag egacteeace aaggeeeece agaceeecag
                                                                     1680
                                                                     1740
gagtggagcg gcccatctct gcgattctca ggaaacgaac tgttccaccg ctggccactc
                                                                     1800
caaaacgccg ccaagtggag cagattctaa gacggtgaag ctgaagtccc ctgtcctgag
                                                                     1860
caacaccacc actgageetg caageaccat gteteeteca ecagecaaaa aactggeeet
                                                                     1920
ttetgeeaag aaggtgggtg tgtgggggte tegeegetge tgtgtateaa gagageteea
                                                                     1976
agagttgctt ggttgtggtt tgaagggagt gagaacattg teeggggget ttggeg
```

```
<210> 5037
<211> 418
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)...(368)
<223> similar to gil469868 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5037
tatttcgtct ccctgcaggt ggaggtagaa tcgaggaaca gtccggagaa ggaggagcga 60
gtgcctgccg aggagatcac ctatgagaca ctgaagaaag ccattgtgga cagcgtagca 120
gtggaggagc aggagcgtga gcggcggcg caggtggtgg agaagttcca gaaggcaccc 180
ttcgaggaga ttgctgcaca ctgcggggcc cgggcatcgc tgctccagag caaactcaat 240
cagatctttg aaatcaccat ccggcccca ccaagcccat caggaaccat cactgcagcc 300
tacggtcagc cgcagaacca ctccatcccc gtctacgaaa tgaagtttcc cgatctgtgt 360
gtatactgaa ttccaagagc ctgagctcct caaggagatg gggtctgagg aggggctc 418
```

```
<210> 5038
<211> 1240
<212> DNA
<213> Homo sapiens
```

```
<222> (1108)...(126)
     <223> similar to gil213541 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5038
ttttttttgg ggaagaatgt gtcattttct gaatcccttc tccactgacc cactttccat
                                                                     60
ccctccacac aacttcagta ggttgatggc ttctactggt ccaggcccct tgaccccagc
                                                                    120
tagggcctca gggactttcg ggccttttcc aaaatttcct ccctgatctt ggggtagtcg
                                                                    180
gggtgctccc tgaggacatc gttgcagatt tcgatggcct ccacaaattt cttgtccttc
                                                                    240
aggtagttga aagcaagttt gaagccaatg gcagggttgg cgtgatgact gtacttccag
                                                                    300
gccagtttgt agttggtgac tgcatccttg taggactgct ccttctccat gatgaagccc
                                                                    360
atgtactcat aggeettgta geaggaettg ttgtattgea cacagegeeg cageagttet
                                                                    420
aaggcgaggt cgaacttgct gccctggcag taaatgtcag ccagcaggag ccagctcttc
                                                                    480
tecaggiest cagesteact cageacecag ggggtetigg ccaggegett caacigcata
                                                                    540
600
acgetgteet teteageetg egetatetgg atgaagetge ceagegeage etecatgtta
                                                                    660
geetteteee tggtggeeag eeggeagagg eeetgeagea geegeagetg ggtetggetg
                                                                    720 -
                                                                    780
gagtetgaat gtgggtaaaa eteaegeage agtttetegg eggtgeteae accetgetge
tecaacteet tetteteeat gtagttgete teageteeet ggtteteaaa ageeteteeg
                                                                    840
eccacaacet egitgietgg atteagacag atetgeacea igiggiagai ggegeteigg
                                                                    900
ecceaagtge tgteettgeg tgeettgtte aggaacttta aggettegtt gggetgeeet
                                                                    960
atgtgccage agtagatace tetgcagtaa ttgaaccetg gttccaaagg cacceggeta
                                                                   1020
gacacettet tggccaatte aaagaaggea ggaatgtett caagttttee aettettett
                                                                   1080
agcagatcga ttaatttatg caataccaaa aaattgtcta aaataagaga cagaaatctc
                                                                   1140
caggotgaaa tgoccagtag otgttatcag atgagggtgo tggggcotta ggagaagcca
                                                                   1200
agagatactg cccatctggg ctgagcaggg acattccaac
                                                                   1240
     <210> 5039
     <211> 1780
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (13)...(617)
     <223> similar to gi5824481 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 5039
cggtggaatt cgatggatgc ctgcaacagg tacagcaagc tgaattgctt agtggcgcc
                                                                    60
```

<220>

<221> misc\_feature

120

180

240

300

360

acactettee tggagtteea tggeteecag caggeactgg aggageaget geagegeaca

gaggagatag tecageagaa eggageetet gaetteteet gggeeaagga ggeegaggag

cgcagccggc tttggacagc acggcacaat gcctggtacg cagccctggc cacgcggcca

ggctgcaagg gctactccac ggatgtgtgt gtgcccatct cccggctgcc ggagatcgtg

gtgcagacca aggaggatct gaatgcctca ggactcacag gaagcattgt cgggcatgtg

```
ggtgacggca acttccactg catcctgctg gtcaaccctg atgacgccga ggaactgggc
                                                                      420
agggtcaagg cttttgcaga acagctgggc aggcgggcac tggctctcca cggaacgtgc
                                                                      480
acgggggagc atggcatcgg aatgggcaag cggcagctgc tgcaggagga ggtgggcgcc
                                                                      540
gtgggcgtgg agaccatgcg gcagctcaag gccgtgctag acccccaagg cctcatgaat
                                                                      600
ccaggcaaag tgctgtgaag ggggtctgag cacttagccc acaagttccc tgactacgga
                                                                      660
geoggttetg gaacttttet teatgecaeg geoectgeaa ggaaatagat getgaggeag
                                                                      720
tetteetgee agegageeea etgtatetgg geeeaaggee agagggeeea gagagaagee
                                                                      780
tgagcaccgt gttacctccc tggccctctg gctggccccc aggagccttt ggttcaagta
                                                                      840
aacgacccca gggtggttcc ccagcaaagc tgcttcctct ctgctcctac gcatcctgtc
                                                                      900
ctggcgggaa gagagcgtct gggtccattc aagactctga tgacacccct ccccgaggcc
                                                                      960
teccaetgee ggggteccag gaccettece cetteacetg gtgacaggaa caeteettte
                                                                     1020
ctggtatgga acgtgagete cegtgacatg atgataggte tteteettgg ggeeteeece
                                                                     1080
aataaatctg taataaacct gaaacccacc tacagctacc tggaagtcag caggcagcac
                                                                     1140
ttectecect eccettecag ggtetetgte etttggteag tgaeceettt gttttgggge
                                                                     1200
tgtcctctga cttcttatag cctggggagg aggttggtgc tcagggttcg gaaaggaacc
                                                                     1260
caggicectg teccagetae tecgeeteag agetgaggae etgeceaegg cacatgicae
                                                                     1320
teaggatggg eteceeaact gggeetgaac egggeetetg aacacactga atgtgtteet
                                                                     1380
cagcagetge caegteteta gaaacagaga tgagaetatt tttgcaecca cetetteatg
                                                                     1440
gggtgatgta tegtaceace agetgttttg ceetcaaggt etgtecacee qaqggeetge
                                                                     1500
ccctgtcttg ggccggagcc cgtcttgaga ccttggcagt tgttcccccc taagcccaca
                                                                     1560
ggagggcgcc cgaaatcatg aagctcagat accacgcggc atctgcagct cacgactcct
                                                                     1620
etgeccaggg cetgeggeac teagecetgg geaaacetee teetatggte aggtaagtee
                                                                     1680
tggcagcetg gaagecaage tagteeteca teecetgeag gteecaggaa cetgeagtge
                                                                     1740
tgtctcatct tccttgcccc tctagccttc ggtccctttg
                                                                     1780
```

```
<210> 5040
<211> 421
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (16) ... (170)
<223> similar to gi3341906 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5040
ctegeaggee geaaggtget getettegte teaggetacg tegtgggetg gggteeeate
                                                              60
120
tgcgtgctgg ccagctggct caccgccttc gtcctcacca agtccttcct gccaggggg
                                                             180
gtgagtgttc agcccaggc cccaggcccc taggccctct ctgactggcc aggacccttc
                                                             240
tcagtgccag gggctgtgcc aaggcctgct gtcaggaccc taactctcag tgaccctagg
                                                             300
agatgagcac acaccccctg aactcagaga ccccagagtg gtcacgtgat agcctagcaa
                                                             360
acgctcttca ttataagaaa caggaacggg cgtatgcaac tgctctggta agtcaggtta
                                                             420
                                                             421
```

```
<210> 5041
<211> 628
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(549)
<223> similar to gi2289244 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5041 cagtatattc ggtgctcttc gaactggtgc ttatatggtg tacattttga tgaccaaagg 60 cctgaagcag tcagtttgtg accagggttt ttacaatgga cctgtcagca aattctgggc 120 ' ttatgcattt gtgctaagca aagcacccga actaggagat acaatattca ttattctgag 180 gaagcagaag ctgatcttcc tgcactggta tcaccacatc actgtgctcc tgtactcttg 240 gtactcctac aaagacatgg ttgccggggg aggttggttc atgactatga actatggcgt 300 geacgecgtg atgtactett actatgeett gegggeggea ggttteegag teteceggaa 360 . gtttgccatg ttcatcacct tgtcccagat cactcagatg ctgatgggct gtgtggttaa 420 ctacctggtc ttctgctgga tgcagcatga ccagtgtcac tctcactttc agaacatctt 480 ctggtcctca ctcatgtacc tcagctacct tgtgctcttc tgccatttct tctttgaggc 540 600 ctacatcggc aaaatgagga aaacaacgaa agctgaatag tgttggaact gaggaggaag ccatagctca gggtcatcaa aaaaaaaa 628

```
<210> 5042
<211> 850
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (851)...(538)
<223> similar to gi5902966 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5042
cagtactcca atcaacattt atgtgcagga tcatcaacag acagaccatt ttacagtttt
                                                                       60
cagaattaaa gtcttctagt tgcagtgaag tcttgaatct ggatcacctg gattcatgca
                                                                      120
agatggcaca gggtgcttgt catcatctac atatagagtt agcttttttt gcccatgcac
                                                                      180
aatgtttctt tatcaataat gaagctggat gataccaaat agattctatt gctttattga
                                                                      240
ttattacttt cattaaacaa tgttagccat ataggatgat taaaaaaaca actaatatcc
                                                                      300
ttggaatatg aacateetat taactgatae aaactgaete caeetttett atageagtga
                                                                      360
attttcaggt cacatacaat cagtaattta tactccaaat acaacaatca cgtttgtatt
                                                                      420
aatcatccag tacaattcac aggttcctat tacacaggtg gatgtactta gagagtttta
                                                                      480
gcacaaaagc tgatacaaat atgaaagtgt gctcagtcga atggttagtg aggtgctaca
                                                                      540
ggtgagtgtc ggcgatgggt atcctcctga gctccacgat ctgggagtca gtcaaggtgc
                                                                      600
ecceptectg getgeettga ccagatteat tateactgae actgagacea geaccagttt
                                                                      660
```

```
ttaatgcaaa tattaaatca tcaaactcct gggactcctc atcggctatc agtgacccct 720 ggccatatcc tccagaggac gggaacgtgg ctccattttg tggacttggc tttaaatcag 780 ggctggcctg actgcctgt tggaaggatg ctctctccca gtcaggtggc acctcctcca 840 tagcaccgat
```

```
<210> 5043
<211> 820
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)...(522)
<223> similar to gi297402 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5043
cttgacatgg ccccagctct tcctggagac cctgccggag ctcctgcaca tgtcccgccc
agcagaggat ggacccagcc ctggggccct ggtgcggagg agcagctccc tgggatacat
                                                                      120
ctccaaggcc gaggagtact tectgetcaa gtcccgcagt gacctcatgt tegagaagca
                                                                      180
gtcagagcgg catgggctgg ccaggcgcct caccactgca cgccggcccc cagcaagctc
                                                                      240
tgagcaggcc cagcaggaac tettcaatga getgaageca getgtggatg gggcaaactt
                                                                      300
cattgttaac cacatgaggg accagaacaa ttacaatgag gagaaagaca gctggaaccg
                                                                      360
agtggcccgc acagtggacc gcctctgcct gtttgtggtg acgcctgtca tggtggtggg
                                                                      420
cacagootgg atottootgc agggogttta caaccagoca ccaccocago ottttootgg
                                                                      480
ggaccectac tectacaacg tgcaggacaa gcgcttcatc tagggtgggc ctgttgggga
                                                                      540
gccaggagac agcagggtct gagagaggag ccacagtccc taatgacacc cactcctagc
                                                                      600
cctgaggctc gtgcccctca gactggggaa gagtccaagg aagggaggga gcagccactc
                                                                      660
ctcaatgctc aatggctccc ctgaaatcaa gacaggggcc acccgagatg gtctgagggt
                                                                      720
ggacatcggc tacagtgggt gggcaggacg atttgggggg aggcccgagg ctggctcagg
                                                                      780
ggccagggag gagaacactc agggtggcct cagggggaga
                                                                      820
```

```
<210> 5044
<211> 841
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(842)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (812)...(319)
<223> similar to gi297437 in the genepept database release 114,
```

## Run with FASTXY 3.3t00, default parameters

```
<400> 5044
ttttttttt ttcaccattg aagaacctgc attatcgttt attgtgatcc taattcggtc
                                                                      60
cacagtaaca attgaaactg cotogactaa attttaagtt totggggcag caccaccatg
                                                                      120
aaggcagcga ctgccttttt aaaagacagg gttctgacat tcagagattt ctgtttctct
                                                                      180
atccatcatt tttgggcatc ttgaatcacc tgatttagag tcagtgacat cctgactgga
                                                                      240
ttggttctgc tctcgctggg cgggtgagac ccccagaccc acgtccacag tgcacctgat
                                                                      30Ô
gttctcccag cggtcgtcac ttccccaagg aggccaggta ggcataccag aacagagetg
                                                                      360
ccaggttggc gaagagcacc cggaacttca gagggacgta gttgatgttg atgaactgta
                                                                      420
gtggcgtcca cacccgccag ttcatcctca gcgccggcca gaagcccccc ctcatcttgg
                                                                      480
cggcgaaggc tgaggcgtct ttcccctcca gaaagttcat gatgaggaag aacaacatga
                                                                      540
ggaaggccgg tgcaaagacg aggcggtcca ggagaagcct cctgagccct gccaggggga
                                                                      600
ceteaggagg gateeaatgt teeatgaaga agtagaagaa gtgaeteage ggeeetgtga
                                                                      660
agaagaaccc gtaaacggca tatctcagag gcccaccgac atccagactt ctagagtttt
                                                                      720
cttttttccg cttcttctca atcatctggg ccaggaagtt cccaagtgct gacaaaatgc
                                                                      780
cactggtggc cgccttggtg agcaccggga attccaccac ncggactaag gtcctcaagg
                                                                      840
                                                                      841
```

```
<210> 5045
<211> 1988
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (34)...(759)
```

<223> similar to gi200785 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5045
agetgeacea etagaaagat ggeggageaa gageaaagaa aaateeettt ggtteeagaa
                                                                   60
aateteetga aaaagaggaa ggettateaa geeeteaaag eeaceeagge aaageaggea
                                                                  120
ettttggeaa agaaggagea gaagaaagga aaagggetea ggtttaageg aetggaatea
                                                                  180
ttcctacatg attcctggcg gcagaaacgt gacaaggtgc gtctcagacg actagaagtg
                                                                  240
aaacctcatg cottggaatt gooagataaa cattcottgg cotttgttgt acgcatcgaa
                                                                  300
aggattgacg gcgtgagttt actggtgcag agaaccattg caagacttcg cctaaagaaa
                                                                  360
attittagtg gtgtctttgt aaaagtcacc ccccagaatc taaaaatgct gcgtatagtg
                                                                  420
gaaccttatg tgacctgggg atttccaaat ctgaagtctg tccgagaact cattttgaaa
                                                                  480
cgtggacaag ccaaggtcaa gaataagacc atccctctga cagacaatac agtgattgag
                                                                  540
gagcacctgg ggaagtttgg cgtcatttgc ttggaagacc tcattcatga aattgccttc
                                                                  600
ccagggaage atttccagga gatctcatgg ttcttgtgcc ctttccacct ctcagtggcc
                                                                  660
cgtcatgcta ccaaaaatag ägtgggcttc ctcaaggaga tgggcacacc tggctatcgg
                                                                  720
ggtgaacgca tcaatcagct catccgtcag ctgaactaga cccaggtgcc aaactgcggt
                                                                  780
840
ttcagagaag attatttcct gctttatctt cagaaactgg aaagggtcaa agaaaagaca
                                                                  900
gtagetggee ggtegtggtg geteatgeet gtaateecaa eaettaggga ggetgaggtg
                                                                  960
```

```
ggcagatcac ctgaggttgg gagttcgaga ccagcctgac caacatggag aaatgccatc
                                                                     1020
totactaaaa atacaaaaat tagoogggca tggtggcacg tgcctgtaat cocagotact
                                                                     1080
caggaggetg aggcaggaga atcgcttgaa cctgggaggt ggaagttgca gtgagctgag
                                                                     1140
                                                                     1200
atcacgccat tgcactccag cctgggcaac aagcgaaact ctgtctcaaa aaaaaagaaa
agacagtage atatgtteat gteaageace teteateaca gtegagttee aaggaaaaat
                                                                     1260
tecagegttt tetgeattgg gtgetgtgte atetgaaate ggeacattee atggaggaag
                                                                     1320
gagteetget ttgttgeatg tateetaggg tttaatgttg gtaaatgagt cactetagea
                                                                     1380
tttgtagaag gctccctgag actcctgcag cagtcgacca agcccaagga cataattgaa
                                                                     1440
tetggagagt cetggggeet tgttttgaaa aagaettgaa atacacatag gaagaaagge
                                                                     1500
ataaaaataa atgttcactt gtctctgctg tgagtatgtg ttccaacttt tcagtgatgg
                                                                     1560
ctttgagaat teteaaactt gaetggetet aagtgtatet ggtggetttt gtategtaac
                                                                     1620
ctgaaactgg cttagtactt tttcctaaaa gctcaggatt tgagaatgag gaccccttcg
                                                                     1680
ccaggaaaac atgtatacac tcaaaatttt gcttgcagtt ctagggtgtt tagacccttc
                                                                     1740
teagatacet gtgeatetta tgggttttgt ttttetettt gagacagtet caccetgttg
                                                                     1800
eccaggetgg agegeagtgg egtgateteg geteattgea geetecacet cetgggttea
                                                                     1860
agtgattetg ceteageece ttgateaget gggattgeat geatgtacea ceacaceegg
                                                                     1920
ctaattettg tatttttagt agagatggag acagagttte accatgtagg teaggagtte
                                                                     1980
gagaccgg
                                                                     1988
```

```
<210> 5046
<211> 1346
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(706)
<223> similar to gi2636482 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5046 ggtggtggaa ttcgcggatg tggagaagaa aggtgctggc aggacagagt tccgctaccc 60 ttcctatgtg cagcacatca tgggggacat attctcccag ggatttgggc ctttccgctg 120 ggtgtgcaca tcgggggacc cccaggacct ggcggtcaca gacgaactgg ccacatctgt 180 gctggaggaa gccattgctg atggagtgaa ggtgtctgtg aagctgcagt acatggacaa 240 cateegetgg ateegggagg cegecaggea eeggetggtg gtgggeteee aggeaaggat 300 cetgtactea gaccagaagg geegegtgge categetgtg gecattaace aggecatege 360 ctgcaggagg atcaaggcgc cggtggtcct gagccgagat caccatgacg tgagcggcac 420 cgacagecee tttagggaga cetecaacat ttacgacgge tetgeettet gtgcagacat 480 ggctgtgcag aacttcgtgg gagatgcctg tcgcggagcc acctgggtcg cccttcacaa 540 cggaggggc gtgggctggg gtgaggtgat caacggggga ttcggcctcg tgctggacgg 600 taccccggag gccgagggga gagccaggct gatgctcagc tgggatgtct ccaatggtgt 660 ggcccggcgc tgctggtcag ggaaccagaa ggcctatgag atcatctgcc agaccatgca 720 ggagaacagc accttggtgg tgacactgcc tcacaaggtg gaggacgagc gggtgctcca 780 graggeretg cagetetgag ggageragga gtegeggere etgerteret terteretgg 840 cgatecteae etgeceagee atggeacaca ceetteetge acaceegeae tacetgeaet 900 totogoacat cotcaegtgg coottatggt goodtgtgca gggtgccacc acagcotcat 960 tttacagaca gccccctgag gcccagagac atgcagctct ctgtccacaa ccatgccact 1020 tgcatgggag ccctgaaggc tgtcaaagtc catttagggc caagtcccaa gcctgcccgg 1080 gggccctgcg gtgaacactg gtcaagctct ctccggctgg gatgatcaca ccctctgctt 1140

```
cetggecace tgecageete catgeaacte tgtetgtetg etgeceatet getgtetgtg 1200 caageaactt etggaceetg geaceetggg etgetggeet ggaggagtte gggaaggagg 1260 atagaceagg aaataaaggg teaacagage tgtgtgetge actgtggget ggtgggacgg 1320 ggeaggeegg gtettgeeta aggata 1346
```

```
<210> 5047
<211> 672
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)...(656)
<223> similar to gi2781386 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

#### <400> 5047 tectgtggtg gaattegagg eccaeetggg tgacaeettg ateateaagt gtgacaecaa 60 gcagcaaggg atgaccaagg tgtgggtgac accaagtaat gaacgggtgc tagatgaggt 120 gaccaatggc acagtgagtg tgtctaagga tggcagtctt cttttccagc aggtgcaggt 180 cgaggacggt ggtgtgtata cctgctatgc catgggagag actttcaatg agacactgtc 240 tgtggaattg aaagtgcaca atttcacctt gcacggacac catgacaccc tcaacacagc 300 ctataccacc ctagtgggct gtatccttag tgtggtcctg gtcctcatat acctatacct 360 cacccettge egetgetggt geeggggtgt agagaageet tecageeate aaggagacag 420 cctcagctct tccatgctta gtaccacacc caaccatgat cctatggctg gtggggacaa 480 agatgatggt tttgaccggc gggtggcttt cctggaacct gctggacctg ggcagggtca 540 aaacggcaag ctcaagccag gcaacaccct gccagtgcct gaggccacag gcaagggcca 600 acggaggatg teggateeag aateagteag eteggtette tetgataege ceaattgtgt 660 gtgagcagga tg 672

```
<210> 5048
<211> 1732
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (320)...(525)
<223> similar to gi4235356 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5048
ttttttttt tttgcgaaag aacagaagag tataatgttc aacatgcagg gaaaaaaata

```
acaatacata tttcagaaat aggagcagct tcagtgcagg cagtatcatg gcagccactc
                                                                      120
cacgggagga acgggatect ctgccaacct tgtcagccac tccaactaag cagctgctgc
                                                                      180
accaggtgtg ttgctgctgt ctttctaagg gttcaagaac atgggctctg gggtcatatg
                                                                      240
geetgegtte acattecage tecatteata geetgeatga cetttageae atgtettgge
                                                                      300
ttetetgeet caattteeee ateteatgga eetgetggee aaggaegaee agaatggega
                                                                      360
ggcggaggcc ttcaaggcag agatcaagaa gaccgacgtg aaagaggaga agaggaagaa
                                                                      420
ggagctgaac gaaatcttga aaagcacagt gagcagcaac gacaagaaaa ccaaaggccg
                                                                      480
gacgggctgg ccgcagcacg tctgggccct ggagctcaag cagtgaggag gaggagaagg
                                                                      540
aggaggagga gagcgcgagt gagcaggggc caaggcgcca gatgcagacc caggactccg
                                                                      600
gaaaageegt eegegeteeg etetgaggae teettgeatt tggaateate eggtttattt
                                                                      660
atgtgcaatt teetteeeet etetttgaee eeetttgagg eatetgetee eegteteeee
                                                                      720
ctccaaaaaa aaagtggata tttgaagaaa agcattccat attttaatac gaagaggaca
                                                                      780
ctcccgtgtg gtaagggatc ccgtcgtctc atagattctg tgtgcgtgaa tgttccctct
                                                                      840
tggctgtgta gacaccagcg ttgccccccg ccaacctact caaccccttc cagataaaga
                                                                      900
cagtgggcac tagtgcgttt gtgaagtgta tctttaatac ttggcctttg gatataaata
                                                                      960
ttcctgggta ttataaagtt ttatttcaaa gcagaaaaca gggccgctaa catttccgtt
                                                                     1020
ggggtcggta tetagtgeta tecatteate tgtggtcgtt ccctctttga agatgtttcc
                                                                     1080
aacagccact tgttttgtgc acttccgtcc tctaaaacta aatggaattt aattaatatt
                                                                     1140
gaaggtgtaa acgttgtaag tattcaataa accactgtgt ttttttttt acaaaaacct
                                                                     1200
taatttttta atggctgata cctcaaaaga gttttgaaaa caaagctgtt atacttgttt
                                                                     126.0
togtaatatt taaaatatto agaagtaaac taaattatoa tgattgooto taactttatt
                                                                     1320
ttaaagactc agtgggttcc aaccagttca ccctgacctg cggcctacgc agaagggagg
                                                                     1380
gagggtgctc ttaaagagga aggtgtcctt gttacaaaat cctgcaaatg ggtctgggg
                                                                     1440
tttgtcgggt gtgggtgtct ccttcccctc ttccccccag ctgggggaac ggctggagta
                                                                     1500
ggtctctaga aggaagatct gggctggaga acccagtccg gcagttcgct cagaaggtgt
                                                                     1560
aaaggtgctc ttggctttcc tgaagtcaat cagaagccat ttcttgaggc cgtcagtttt
                                                                     1620
tgtttggaga gtgtttctgg tggaggagtt gtgaggagaa ccccggcatt attgctgcaa
                                                                     1680
cgggaactag tctggggtgt ttaattcaaa ctatggggct ttcatccaaa aa
                                                                     1732
```

```
<210> 5049
<211> 1223
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(365)
<223> similar to gi198609 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5049
gcctcacagt acatcagcga actcacacag gggagaactc ctttgaatgt aataaatgtg
                                                                       60
ggaaaacatt ttactataaa tcaggcctca ctaaacatca gagaaaacac acaggggaga
                                                                      120
agecetatga atgeacagaa tgtggcaaat ettttgetgt gaatteagte etcagattae
                                                                      180
atcaaaggac tcacacagga gagaagccct atgcatgcaa ggaatgtggg aagtcctttt
                                                                      240
ctcagaagtc acattttatt atacatcaga gaaaacacac aggggagaag ccctatgagt
                                                                      300
gtcaggagtg tggggaaacc tttatccaga agtcacaact cactgcacat cagaagacac
                                                                      360
acacaaagaa gaggaatgct gagaagtaag atgagttggg aaattctctt gactgaatta
                                                                      420
atcettcaaa acaatcagat aattcacaca agaggtacac ettatgaate gcatcaatag
                                                                      480
agggaaattt teagetacaa tetttgetet etetgtgtat eageaaatae atagagagat
                                                                      540
```

```
tetgtacatt tatttgggag aaaattttat eatattttag gettttetaa atattagata
                                                                      600
atatagatgg cagaagtcat gcaaattgta aaacaggaag gaaacctttc agaagtcata
                                                                      660
cttttgtttt gcaacataga agtcacacag gagaaaaatc ctgtaagtaa aacgaatgtc
                                                                      720
                                                                      780
atgacatttt ctgtcagggc agccagctgt agacatccaa aagctcacaa atgagaagct
ccttgagtat ctagaaatct ctttacacaa ttggagctca tgtactagag aattcaaagg
                                                                      840
                                                                      900
gataactgca aagacactgg tagatataga agcctttatt aagaattgat gtttcattca
atttcagatc actggtactt ggatagatat tttaaatatt tggaaggtgt tcaataaaaa
                                                                      960
ttcaaataat ttgtactgag ggaaacagtt atactacaaa tcatgttgca gatctgatgc
                                                                     1020
cgagattgct ctattttaaa aggaaacctg caaatgtcta catatatgaa gcttttaaaa
                                                                     1080
agcacaagtt atcaggcaac atcattaaac atacattaaa tgtctgttag catataggat
                                                                     1140
tttgtgcgta tgtgagtgtg ctataacatg taacttgcgg atgttcagcg tgcatgtgga
                                                                     1200
atccatccat aatggtacat agc
                                                                     1223
```

```
<210> 5050
<211> 2763
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (22)...(1090)
<223> similar to gi5630077 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5050
ccatatccat gtggtggaat tcacacaatt ggtcagctgc ttccacagca gatgcaagca
                                                                       :60
ttccattctc ctaaagcact cttccctgtg ggctatgaag ccagccggct gtactggagc
                                                                      120
actegetatg ccaataggeg etgeegetae etgtgeteea ttgaggagaa ggatgggege
                                                                      180
ccagtgtttg tcatcaggat tgtggaacaa ggccatgaag acctggttct aagtgacatc
                                                                      240
tcacctaaag gtgtctggga taagattttg gagcctgtgg catgtgtgag aaaaaagtct
                                                                      300
gaaatgctcc agcttttccc agcgtattta aaaggagagg atctgtttgg cctgaccgtc
                                                                      360
tetgeagtgg caegeatage ggaateactt cetggggttg aggeatgtga aaattatace
                                                                      420
ttccgatacg gccgaaatcc tctcatggaa cctcctcttg ccgttaaccc cacaggttgt
                                                                      480
gcccgttctg aacctaaaat gagtgcccat gtcaagaggt ttgtgttaag gcctcacacc
                                                                      540
ttaaacagca ccagcacctc aaagtcattt cagagcacag tcactggaga actgaacgca
                                                                      600
ccttatagta aacagtttgt tcactccaag tcatcgcagt accggaagat gaaaactgaa
                                                                      660
tggaaatcca atgtgtatct ggcacggtct cggattcagg ggctgggcct gtatgctgct
                                                                      720
cgagacattg agaaacacac catggtcatt gagtacatcg ggactatcat tcgaaacgaa
                                                                      780
gtagccaaca ggaaagagaa gctttatgag tctcagaacc gtggtgtgta catgttccgc
                                                                      840
atggataacg accatgtgat tgacgcgacg ctcacaggag ggcccgcaag gtatatcaac
                                                                      900
cattegtgtg cacctaattg tgtggctgaa gtggtgactt ttgagagagg acacaaaatt
                                                                      960
atcatcaget ccagteggag aatecagaaa ggagaagage tetgetatga etataagttt
                                                                     1020
gactttgaag atgaccagca caagattccg tgtcactgtg gagctgtgaa ctgccggaag
                                                                     1080
tggatgaact gaaatgcatt cettgetage teagegggeg gettgteeet aggaagagge
                                                                     1140
gattcaacac accattggaa ttttgcagac agaaagagat ttttgttttc tgttttatga
                                                                     1200
ctttttgaaa aagettetgg gagttetgat tteeteagte etttaggtta aageagegee
                                                                     1260
aggaggaago tgacagaago agogttootg aagtggooga ggttaaacgg aatcacagaa
                                                                     1320
tggtccagca cttttgcttt tttttctttt ccttttcttt ttttttggtt ggtttttggt
                                                                     1380
ttggtttttc ccttgggggg gggtttcatt gtttgggttt tctagtctca ctaaggaaaa
                                                                     1440
acttttactg gggcaaaaag ccgatggctg ccctgccccg ggcaggggcc ttcctatgaa
                                                                     1500
```

```
tgtaaaactg aaatccccac cgagggggac agaaagtgct gcccacggcc ttattaaaaa
                                                                     1560
ggggcaggcc ctctaacttc aaaatgtttt taaataaagt agacaccact gaacaaggaa
                                                                     1620
tgtactgaaa tgacttcctt agggatagag ctaagggata ataacttgca ctaaatacat
                                                                     1680
ttaaatactt gattccatga gtcagtttat tgtagttttt gatttctgta aaataagaga
                                                                     1740
aacttttgta tttattattg aataagtgaa tgaagctatt tttaaataaa gttagaagaa
                                                                     1800
agecaagetg etgetgttae etgeagaact aacaaaceet gttaetttgt acagatatgt
                                                                     1860
aaatattttg agaaaaaata cagtataaaa atagttattg accaaatgct accaggctct
                                                                     1920
gcagcagete gggggettat aaaatgttea tagggatgtt acaatataat tttgtgttat
                                                                     1980
                                                                     2040
aaaatatgcc attataatta tgtaataacc aaaatttcaa cctagagtgt tgggggtttt
ttggaaaccg cagtotatta gtactcaatg gttttataca cottacttot gacagagogg
                                                                     2100
ggcgtatgct acgactacaa cttttatagc tgttttggta atttaaacta attttttcat
                                                                     2160
attatattgt tgcatcccta cttcttcagt caggtttttt tgtgcttaca atttgtgata
                                                                     2220
actgtgaata actgcttaaa aatacaccca aatggaggct gaattttttc ttcagcaaaa
                                                                     2280
gtagttttga ttagaacttt gtttcagcca cagagaatca tgtaaacgta ataggatcat
                                                                     2340
gtagcagaaa cttaaatcta accetttage ettetattta acacaaaaat ttgaaaaagt
                                                                     2400
taaaaaaaa aaggagatgt gattatgctt acagctgcag gactctggca atagggtttt
                                                                     2460
tggaagatgt aattttaaaa tgtgtttgta tggaactgtt tgtttacatt tctttaataa
                                                                     2520
aaaaaacact gttttgtgtt tgcttgtagg aaacttaatc accattttga accaggttag
                                                                     2580
ctttttattt tggtacttaa aattetggta etgacaette acaggetaag tataaaatga
                                                                     2640
agttttgtgt gcacaattca agtggactgt aaactgttgg tatattcagt gatgcagttc
                                                                     2700
tgaacttgta tatggcatga tgtattttta tõttacagaa taaatcaatt gtatataaaa
                                                                     2760
                                                                     2763
```

```
<210> 5051
<211> 1853
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1011)
<223> similar to gi5052516 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5051
cggccgcgtc gacatgaget tgtccgtcag ctggtagett tcattcgtaa aagagataaa
                                                                       60
agagtgcagg cgcatcgaaa acttgtggaa gaacagaatg cagagaaggc gaggaaagcc
                                                                      120.
gaagagatga ggcggcagca gaagctaaag caggccaaac tggtggagca gtacagagaa
                                                                      180
cagagetgga tgactatgge caatttggag aaagagetee aggagatgga ggeaeggtae
                                                                      240
gagaaggagt ttggagatgg atcggatgaa aatgaaatgg aagaacatga actcaaagat
                                                                      300
gaggaggatg gtaaagacag tgatgaggcc gaggacgctg agctctatga tgacctttac
                                                                      360
tgcccagcat gtgacaaatc gttcaagaca gaaaaggcca tgaagaatca cgagaagtca
                                                                      420
aagaagcatc gggaaatggt ggccttgcta aaacaacagc tggaggagga agaagaaaat
                                                                      480
ttttcaagac ctcaaattga tgaaaatcca ttagatgaca attctgagga agaaatggaa
                                                                      540
gatgcaccaa aacaaaagct ttctaaaaaa cagaagaaaa agaaacagaa accagcacag
                                                                      600
aattatgatg acaatttcaa tgtaaatgga cetggagaag gagtaaaggt tgatecagaa
                                                                      660
gatactaact taaatcaaga cagtgccaaa gaattggaag atagtcccca ggaaaatgtc
                                                                      720
agtgtcacag agatcattaa accatgtgat gatccaaaaa gtgaagctaa aagtgttcct
                                                                      780
aaacccaaag gaaagaaaac caaagatatg aaaaaacctg tcagagtacc tgctgaacca
                                                                      840
caaacaatga gtgttcttat cagctgtaca acctgccata gtgaatttcc atctcggaat
                                                                      900
```

```
960
aaactttttg accatctaaa ggccacaggt catgcaagag caccttcatc atcgtcttta
aacagcgcaa caagtagtca aagcaagaaa gagaaacgta aaaacagata gagattctgc
                                                                     1020
ctgtgctttt gtttgactgt ctctagattt tgaaaccaaa aaactgaact gaaatcatct
                                                                     1080
aaagagttaa aatttcagtg atctgcaatt aattacattg tggaagatta ttttttatct
                                                                     1140
tgtaaaaaca ctittttggt ttaatatata tttttaaaac atttcactag tgattgaatt
                                                                     1200
                                                                     1260
ctacttttgc catctgaatt gacttgaatg tcttaaaaca ggtaaatact gtaaagtgtg
                                                                     1320
tattettgat gtttattgge teatgtggae agaaatgtae agggagaatt acattatttt
aacacacaga agtgcaactt totgotttat tttotgaatt toacattact titacttaat
                                                                     1380
gcttttgtgt tttgttaata cttcataata tgtgaaaaac tcggatcttt taaaaagcat
                                                                     1440
catagatcat ttttccatat gacactggtt ccgattttaa aaattatttt taaataaccg
                                                                     1500
attattgatt actgtatttt tittictcaag aacagtgata ggtagaaact aattgaacat
                                                                     1560
ttggtagtet tteaagaata gtgtetette aaggttttae ttgatttaat ttgatatttt
                                                                     1620
actggtttac cagtaaggtg tattgttcag tttttttgctc cgatttgaat tgtggaggtg
                                                                     1680
gaagcaaatt agtttacatg gcatgtcctc cctaggcaca gtgacagctg taaagtatga
                                                                     1740
cggaacaagg tagcagatgg tacagaattt atactattta agaagagatg tggcgttctt
                                                                     1800
cattgagttt ttttcttcac tattttcaga agtttttgtt ctttttttt tcg
                                                                     1853
```

```
<210> 5052
<211> 2039
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (88)...(735)
<223> similar to gi5911875 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5052
atcogocaag ettggcacga ggcetegtge catggtetgg etgcacteag teceteaage
                                                                       60
aagggeteea tggaggetgg ceettaeetg eeeegageee tgeageagee tetggaacag
                                                                      120
etgacteggt atgggegget cetggaggag etcetgaggg aagetgggee tgageteagt
                                                                      180
tetgagtgee gggeeettgg ggetgetgta cagetgetee gggaacaaga ggeeegtgge
                                                                      240
agagacetge tggeegtgga ggeggtgegt ggetgtgaga tagatetgaa ggageaggga
                                                                      300
cagetettge ategagacce etteactgte atetgtggee gaaagaagtg cettegeeat
                                                                      360
gtetttetet tegageatet eeteetgtte ageaagetea agggeeetga aggggggtea
                                                                      420
gagatgtttg tttacaagca ggcctttaag actgctgata tggggctgac agaaaacatc
                                                                      480
ggggacagcg gactotgott tgagttgtgg tttcggcggc ggcgtgcacg agaggcatac
                                                                      540
actictgeagg caaceteace agagateaaa eticaagtigga caagttetat tigeeeagetig
                                                                      600
ctgtggagac aggcagccca caacaaggag ctccgagtgc agcagatggt gtccatgggc
                                                                      660
attgggaata aaccetteet ggacateaaa geeettgggg ageggaeget gagtgeeetg
                                                                      720
ctcactggaa gaggtgaggg ccagggtgct ggggggtggc ccccaggagt gaagacettg
                                                                      780
acaatgagga tacaaagggg aggtatggtg gaaagtcagg aaaggcatct cgtccccaaa
                                                                      840
tcagtgggac tggctgggag gccctctgtg agactgaggg tcattccagg gagccaagag
                                                                      900
ggetttecca caccagcace ccaccecca etecccacte tetgeageeg ecegeaceeg
                                                                      960
ggcctccgtg gccgtgtcat cctttgagca tgccggcccc tcccttcccg gcctttcgcc
                                                                     1020
gggagcctgc tecetgeetg ecegegtega ggaggaggee tgggatetgg acgteaagea
                                                                     1080
aattteeetg getteeeett cageeeeaga aacaettgae tettetggag atgtgteeee
                                                                     1140
aggaccaaga aacagcccca gcctgcaacc ccccaccct gggagcagca ctcccaccct
                                                                     1200
ggccagtcga gggatcttag ggctatcccg acagagtcat gctcgagccc tgagtgaccc
                                                                     1260
```

```
caccacgoot otgtgacotg gagaagatoo agaacttgcg tgcagottot cototcagca
                                                                     1320
cactttgggc tgggatggca gtggggcata atggagccct gggcgatcgc tgaatttctt
                                                                     1380
                                                                     1440
ccctctgctt cctggacaca gaggaggtct aacgaccaga gtattgccct gccaccacta
                                                                     1500
tetetagtet ecetagettg gtgeettete etgeaggagt cagageagee acattgettg
                                                                     1560
cetteatace etggaggtgg ggaagttate cetetteegg tgettteeca teetgggeea
                                                                     1620
ctgtatecag gacateacte ccatgccage ectecetgge ageccatgtt etectetttt
ctcacccct gactttccct gagaagaatc atctctgcca ggtcaactgg agtccctggt
                                                                     1680
                                                                     1740
gactecatte tgaggtgtea caageaatga agetatgeaa acaataggag ggtgtgaeag
gggaaccgta gactttatat atgtaattac tgttattata atactattgt tatattaaat
                                                                     1800
gtatttactc acactttgcc tctaaggagc tagagtagtc ctctggatta aggtgataaa
                                                                     1860
taacttgage acttteecte aaccageeet taactagaac acagaaaata aaaccaagae
                                                                     1920
tggaaggtcc cctctacccc tcccaggccc agagctagct gactgtgtat gagcctggga
                                                                     1980
gaatgtgtct cctccacagt ggctcccaga ggttccacac actctctgaa gctccttct
                                                                     2039
```

```
<210> 5053
<211> 3123
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(742)
<223> similar to gi5912134 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5053
gtcaggtcca tgagctgccc accgtcctgg ccttactgtg cccctgccc caccaacata
                                                                    60
ggtgaaagca cctcccctct aaggaagacc atagagaccc caacactgtg ggaccccaaa
                                                                   120
geteetteat geteactgga geteecaceg tgggtgettg caagteetea gegeteegg
                                                                   180
ggtacagece teceetteet geoetetaat gteeteeest ecettgeest teceteeact
                                                                   240
teetttetet geegteeect eeteteeeat ettgtgaeet etttaetgge ggggeetgga
                                                                   300
gcccatgatg gacacttgcg gaaggagggg tggcggagca cccctgagat gacatcgctg
                                                                   360
cetgeeccag ageaeceege etetecetgt gaeteagtte titgeageee agatgtgage
                                                                   420
atgtgcacco tgggacctgc tgcccgttgg gatgcccagg ccaaatcagc ccctctgcct
                                                                   480
ccatgetgca etgattgcaa gagttteeca catetgcaga ggeegtggge teageeceae
                                                                   540
accagecagg ccaccagtgt tgatageggt gaggegggga caaagggaat gteteagtte
                                                                   600
acagtgtgga catggtggag gtctcggcct tgcgagacaa ggcaggggga ggggatagga
                                                                   660
aattgggggt attotgtgac tootgggoca coggggagec agaatettec agccagactg
                                                                   720
gatgggcagg gettagette etgatgeege ecatteacea ettteacece gggaacetae
                                                                   780
840
ctaaaccatc cctcacccta acccaatcct cgccctaacc ctaatgctaa cccctgaccc
                                                                   900
gacccaatcc taaccctgat gctaacccct gactcaactc tcaccctaac cctgatgcta
                                                                   960
accectgace caatecteac cetaacactg atactaacce ttaacctaac ccaacccage
                                                                  1020
cetaacteca actetaáage taactectaa ceetaggaga ggageceagg cegggeeete
                                                                  1080
tecetgetgg ttteetgttg ggetttggag ecceagatge etgeecagag getteettgt
                                                                  1140
gcggggtggg gtccagcagt gggggatggg cccagagctg gtgtagccac cagcagagcc
                                                                  1200
atcotgatoc acaggacoat coctggtggg gtggggcccc ctgggggcagg aaggccactg
                                                                  1260
aggccaggga gactcccagg cccactcacg gcgcaggccc cacaggagct ggctggaggc
                                                                  1320
tatgggtgeg gggegtggge etgeeggggg ttgegtgaca ggeagtgggg agtgggttgt
                                                                  1380
getggeaget gtgggtgagt gaggaggete eteteatgaa gggeeetggg gaagtggaat
                                                                  1440
```

```
etggccetga gagacceccg gecteetetg caggggetge eggcaggagg ggaaccgggg
                                                                     1500
accacctece gecacagage etggggeece cageettgee tacagggagg gtagatgaga
                                                                     1560
gtgtaaactg catatgaggt tgggctaaac ctggacatgt gtttcataac caaagcagcc
                                                                     1620
aggaatetee ggetetgeee agtgateate tgggeaggae atggggaega gtgteeagge
                                                                     1680
tgaagtcagg gcccggccag cagagggcca ttttgtattg agctccacag ctggtcacat
                                                                     1740
tetgtggaat gtgeagaegt geaeggeeea teagaeaggg tetggagtgg ggetgeeate
                                                                     1800
ttgggcaget eeteeegggt gtetgeaaaa tgeagaggte accagageea aggeageaag
                                                                     1860
gcaaggagcc cggcttctaa ggaactctga gcaggtgtgg tccatggctg ggaggcagct
                                                                     1920
ggccccacag cacatagcac ggagggcggc gcggagtcct ggacgctctt ggcaggtccc
                                                                     1980
ctcatggagg atgtggggga ttggcttagg cctggtctgg ctggccttcc tggaccgcag
                                                                     2040
tggccaggag ctgaaaaccg tgaccccagt ctccctgcag ctgttcttga tgggatttct
                                                                     2100
gttcgccagt cagatgcatt tgcacaggac ttggatcctg aactgtgtaa cctggagagg
                                                                     2160
caggigigag egggecatge igetggeeca geetgigeeg gigtetgitt eigitgiete
                                                                     2220
teggeeette tgtgageeet eagtaaaget ettegtgett eagteageaa gagtggatte
                                                                     2280
tgtcgtcggc aactctgggg accaaacccc gagcctcccc ctcccccaga ccttgcagtg
                                                                     2340
ccatggaget gagggacetg tggatecaca getgtggeec eggaaggget geaggagetg
                                                                     2400
aacctgcgtg agccccgcag agggtgcaga gccggcttgt gcaggctccc agcaggctca
                                                                     2460
tgacagcgcg gatggttaaa tgtagctcct gacagccaac tgttaaggtt tcaggcattt
                                                                     2520
ttgcaccagg tgacatgatg gtagcctgaa cgtgaccttg gcagcagtct ctacatcaag
                                                                     2580
gaaactggca aatgtcaaca tgctgggtac cctcgctcct gccgccgcag gctgtcagtg
                                                                     2640
tettecagee cacactgegg ggggeettgt tgtgtggetg ceteceagge tggggegagg
                                                                     2700
gtetecagag accaecateg tgcaggetet tggteaatag cagggtgtgg tgetectgee
                                                                     2760
aggggacgca ttctccgtgt gacctctaca ccccaggtca ggtcaggatg tgatttgctt
                                                                     2820
ctccagggcc gtgactcact agatccacct cccactggtg cctggtggcc cccgacagcc
                                                                     2880
etggeeetgt ceaggeeetg geetgteeta eagteaeagg tgetggeetg teeetgetgt
                                                                     2940
cetectgace acctggtget eccggecace etgecegece ecctgtetee tegggacage
                                                                     3000
                                                                     3060
etggetgeet ceaettgetg geeeetgeeg geeeaeeete titteeaagee tgeeetgeee
ctcagetect ggggtgggga ggggagaeet egeettetge etgcagegae teccacetgt
                                                                     3120
                                                                    ,3123
```

```
<210> 5054
<211> 1493
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (961)...(1212)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5054
geccatgact acgccaaact tggcaegagg cetgagteet ttgagcaect gecaectete
                                                                       60
ccagtatete ettttecaet acetgaatta gtagaggaaa ggggagaeae actteeteee
                                                                      120
cagaageetg ageteaaagt gaaacgggtt tteagaceea atggeattge cetgaettgg
                                                                      180
aatataacca aaatcaatcc caagtgtgct cctgtagaaa agctaccacc tcttcctgtg
                                                                      240
tcatgagaac tctaataata agttgatttg gaagaagatt ggagaaatta aagctttacc
                                                                      300
actececatg geetgtactt tateteagtt tttagettee aacagatact attttactgt
                                                                      360
ccaatcaaaa gatatttttg gacgatatgg accattctgt gatataaaat ctatcctgg
                                                                      420
gttttctgaa aatcttacgt aaaaggtgtt taataatgat atactacttt ttttttcata
                                                                      480
```

```
tttgtttgtt tgcaatgtta ctgtaatact atttgccatt gtaaaaggcc agctcagatt
                                                                  540
gtgagccctt tctattggga cagtcctctt ctatatgttt taagtggcca gtaatttaat
                                                                  600
gaatttctgg tttgtattaa atatgtcctt ccaatggata agttctaaaa catacgctat
                                                                  660
cattggccca tgttgctgag gtgcattgtg aacaatacct ttagtgactg tggaactgct
                                                                  720
gettetatea gaagaeetag gatacaagea geeaetgttt eeteegttaa caateagett
                                                                  780
ttagtaacct gctgtggtca gcatagctac aggaaaagtc agcccttgac tgagggccag
                                                                  840
atcatecetg gagtgeacet etactaagat tttatgaaaa gatgacatgt tgggetgeat
                                                                  900
960
geocaggetg gagtacagtg gtcactgcaa cetecatete cetggttcaa gcaattetee
                                                                 1020
tatgtcagcc tcccaagtag ctgggactat agtcacttgc caccatgccc ggctaattta
                                                                 1080
tttttagtag agatgaggtt tcaccttgtt ggtcaggctg gtctcaaact cctgacctca
                                                                 1140
ggggatecae eegeetegge eteeegaagt getgggatta taggegtaag eeaceatgee
                                                                 1200
tggccaaaaa ttaaaagatt ttatgaaacg aaatggcttc ccattctttc tattcagctt
                                                                 1260
ctaagtgggc tattcatttg ggctctcctc tttttttgtt ttgttttgca cttttgttca
                                                                 1320
atcatttggg gaaatageet ggaggtettt cetgaatetg tttgtagaea taataaaatt
                                                                 1380
tgtgtgctgt gtacacaaaa acataatgta tcttatgaaa gcattaccca acctgtttga
                                                                 1440
gttgagaatg atttggccca ccttagattt gaggctttag ttggctgatt tcc
                                                                 1493
```

```
<210> 5055
<211> 3886
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3887)...(418)
<223> similar to gi4468339 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5055
ttttttttgg agacacaaaa agtcagagag actttattta aatagagtta atttgaagta
                                                                      . 60
aaccagagag ttttgtgtgc agaagcattt tgcttaactt agggccatca ccacattatg
                                                                      120
aactegtgtg tgtgtgtgtg tgtgtgcaeg egegegtgea eaggetagtg teettetgtg
                                                                      180
ggtgtgtctg cgtgaggacc catccatgca tgtttgatct ttatggcctc cccctgtgca
                                                                      240
ectgegeeta tggataaggt atagtettgt ettgatteee agtatteatt eteettgaag
                                                                      300
aatcctgaca gccttcagtc accttccctt ttccagtctc ccaaaagcaa tggcgcctta
                                                                      360
aatgtgcggt aaggatgagg tgagtcttga ggtagcctag gccacagctg,ccccttcaag
                                                                      420
gcaaggcctc agctgagttc aggaaatagg agaacctggc cccggagcaa ccccagaagc
                                                                      480
gcaggaccac gaacgtcctg acccccagca gcaagaggcc gcccagggcc ccaaagaaga
                                                                      540
tgccgaagaa cgcgtcgagt ttcatgctca ggtgctcaca gtgctcgccc caggccgtgt
                                                                      600
agatggagaa ggacacacag ctgcagcggg gccctctggg caggtgctgg cactggcctt
                                                                      660
catggtcaca gtagccccta ctgcacgggg acacgcaggt gaagccgctc tgggggctgt
                                                                      720
agaccaggte gtagecettg tagecatege atetgaagta ageetteage gtgeteaegt
                                                                      780
tcagggctgt cacatcgcgc acgtcttcct cggagatggg ctggaagacc acgtcgttcc
                                                                      840
tgggctcctc actcctccgt ggaacgtggt ataagaacgc ctccaccacc gcggccagca
                                                                      900
gctggttgtt caggaagtca atgaccgggc cccgagggcg gtactggaac tccgagatga
                                                                      960
ccatccagtg ttggatgggg cttcccgagg ccggtgctgc agaatcgatt cgttccactt
                                                                     1020
ggctgttgcg gagaaaggcc cgcatgtcca gggtccccag tctgtatgcc accgaggcgt
                                                                     1080
tgacctctgc catggaggca ttttcctctt cactgagcaa gagctggatg actcttaagg
                                                                     1140
gaagttctag gttgacagtt ggactgaagt tgttcccagc caggaagcag cggctgtcag
                                                                     1200
```

```
tgaaggctgg ggggcaggtg cacatgggct gacagcccag agtctgggag atgtagcagt
                                                                     1260
ggccttgatt gtagcagtaa ttcacagggc aggactggtt ctgacacagg aaagagctcc
                                                                     1320
ccagageege acagtgeege ccatecccag teaggtttgg agggeaggee tegeageeet
                                                                     1380
teccaggaac geagtggaca etegggaage aeggeteete acaggeatee teggageeet
                                                                     1440
cgcagtagcg gccgaaggtg cccccgtcac acttgcagcc agccacctcc agggaggagt
                                                                     1500
tgcccaccet getggtetga ttgtacaaac actggetete tgcattgcaa tggcagacca
                                                                     1560
cagtcctggg ctggagtgca gatgccaagc caatcttggc acttcttgct agaatctcca
                                                                     1620
gagtgaatgg ctccagcgac ttgggtgtcc acagcaacgt cccattctca aagagctcca
                                                                     1680
agtcggtgca gctgtctctg agcgtgaagt tggcatcctc agcattgctg gtgtactgaa
                                                                     1740
teagegtggt etgeceettg taggetteaa teacaegace accattgatg gagggegggt
                                                                     1800
actgattgag ggtggcgttc gcctgctcgt agtttttact gacttccctc gtgtgaagtc
                                                                     1860
cgatgcttgc gttgcgcagg gccagggtgt catagatgca tgagctatct ccgtcacagt
                                                                     1920
tggagatcaa atgttcagcc caggagctgt ttttttgcag ttgtgagtag aaaacagggg
                                                                     1980
tgaagttgga aggcagctgg tcattcctct tgccaaggag gcctgtcccg ttgatctgcc
                                                                     2040
aggtcattcc aaagtggaaa agcatctcct cagggctccc tggggggaatg gtggagccat
                                                                     2100
tgggcatcct gaagtcgtcc tctggattgt tattccagac ccccaggagc ccctccgtgc.
                                                                     2160
ggttctggta ctcgggcggg aggctggcgg aggcgtggag gatgttggag agcgcgatca
                                                                     2220
ccgagacggt ggcccagccg tcgaagctgg ccgagacctc agagccgttg cggctcagga
                                                                     2280
ggactccggt ggcgttgaac gtctcctggc ctccgccgtc ttcatggtca ggctgaaatg
                                                                     2340
teacagtetg gttatecage aggacaegga ttgegtegtg aggeteaagg agecattgga
                                                                     2400
ccgtgacggg gcccaggctg ctggagcggt actgagccgc aaaggcgatg aagttggtgg
                                                                     2460
cctgggctga gccagtctgg gcggtgcggc cctgaagcag gaaggaggag ttcccgtctt
                                                                     2520
gggccccgac cagcagaaag tcccccagcc cattgaaggt gtaactgaca ccatccaagg
                                                                     2580
tggtgatgtg ggggtccccg aacatccagg cgggctgtgg gggcctgtat gtagcacagc
                                                                     2640
ccacgtgggg ccgcctctgc tggtacaggg cacagaggta gggcttgtca ttccagcggc
                                                                     2700
agcaccaget etgtggetee agtteetggg ecaactgeea aggaegetge aegtgeeage
                                                                     2760
cttcacgaaa ctctccccag ggcccgtagc tgcagcacac gcctcctcgc caagaggtga
                                                                     2820
agctgcacag ctgcctactg ccgaggcccc agcgacctat gctgacgggt tggaatcgta
                                                                     2880
agtcccgtcg tecetgetge caggaceaag ggeaggagae etggttecag eeccagetgg
                                                                     2940
gccaccgagg ctggctcttc agccactgca ggcactcgag acggtagttg ggcctttctt
                                                                     3000
cccggtgtag cctgtagaac tgcagccctt ggaggcctga gttggaattc aggaatctat
                                                                     3060
cagggcgata ceteteceae aetggetggg acateagtgg getgtttteg aaatageeat
                                                                     3120 ·
ctccactaga gaagcccatg agcaccgggt tgcctgagcg ctgggccacg tcccactgca
                                                                     3180
teccaceget etggtagaga aacagggeat aggacetget eeegteegtg gagaggatgg
                                                                     3240
cttggtaggt gttgctcccg agggtccact gggcaggata ggcgtgggca ttgacccacg
                                                                     3300
tgacctttag ggcccacctg gccttgtagc ccccgttgtt tgtgatcttt ctaatccaag
                                                                     3360
acteggeetg etggaetage aggetgtgtt caccatagaa egtetegtat teetgataaa
                                                                     3420
atgtggtccc ccgaccagtg gagaagtcag catcgtccca gaacggagcc accagggcca
                                                                     3480
cagggteceg geetgtgaag eetgttggga gtgggttggg gtaggagaaa atetggtagt
                                                                     3540
ctgactctgg gaagatgatc tggccattgt ctgtgaagta gagggaatca cggagagagg
                                                                     3600
agccaagggg gaagccagtc gccggcttga agagtgggga ggtgaagtcc acggtcctcc
                                                                     3660
tgacgaactc caggtccccg gcgtctgccc cataggggaa gagggaaact cctctctcag
                                                                     3720
gcaggatggg gatgggggca gctgtggagc gggtgtgcat ggcagtgctg ggaatggtgg
                                                                     3780
aaatgatggt ctgggaggtt gtggggggtg gtgatgtggc tgtgcgtctc ccaccgtctg
                                                                     3840
tetteagtga eggtgttgte attectgatg tttecatett cagagg
                                                                     3886
```

```
<210> 5056
<211> 1543
<212> DNA
<213> Homo sapiens
<220>
```

<221> misc\_feature

<222> (17)...(528) <223> similar to gil8218 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5056
ccgtgtggtg gaattcaaaa ctggcaaaga tgtggccacc caaatactag aaggagagct
                                                                       60
ctttgacttt gatcttgaag ttaaaccagt gttagaagtt ttggtgggga agacaattga
                                                                      120
gcagtetett etggaagtaa tggaagaaga agagetgget aacetgeggg ccagteageg
                                                                      180
tgagtatgaa gaactacgga atagtgaacg tgctgaagtt caacgacttg aagagcaaga
                                                                      240
gaggcgacac cgagaagaaa aagaacggcg taagaaacag cagtgggaaa taatgcacaa
                                                                      300
gcacaacgag acatcacaaa aaatcgccgc ccgagcattt gcacagcgtt acctggctga
                                                                      360
cetteteceg tetgtttttg geageeteag ggatagtgge taettttatg ateceattga
                                                                      420
aagagatatt gagataggat ttetteeatg getaatgaat qaagttqaaa aaaccatqqa
                                                                      480
atatagcatg gtgggaagaa cagtgcttga catgttgatc cgtgaggtgg ttgaaaagag
                                                                      540
gctgtgtatg tatgagcatg gggaagacac acatcagtct ccagaacccg aggatgagcc
                                                                      600
tggtggtcct ggagcaatga cagagtcact ggaggcctct gaattcctgg agcagagcat
                                                                      660
gtcacagaca cgggagctgc ttttagatgg aggctaccta caaagaacaa catatgacag
                                                                      720
aaggtcatcc caggaaagga agtttatgga agagagagaa ctcttagggc aagatgaaga
                                                                      780
aacagcaatg aggaagteet taggggagga agaattgtea taggagggaa getteaaagt
                                                                      840
catgaaacca atcaacagcc aagtcagcaa gcaatcaggt aatgatgtgc gagtcccctc
                                                                      900
aggttataga aattatgttg tatttagtca gtatgtcttt ttgtgtaatg gactgggcca
                                                                      960
atcaaatgtg ataaaattaa tttgagaatg aaacttaaat tgaattcatt tatttaatag
                                                                     1020
aatattcaaa ggctatattg taattctaat gagaattata tttaattact agctttctat
                                                                     1080
taccattata tgtaaccagc aaatatattt ttccttagcc cttctaattt tgcgggttag
                                                                     1140
ttttttttag taagtatgat atttaatgtt caatatcagt gctgtcagcc atatagcttt
                                                                     1200
tettetetat aggaaaaact attteaceta etgtaagagt gaatgeetag eeaggegtgg
                                                                     1260
gtggctcaca cctggtaaat cccagcactt tgggaggctg aggcgggcag atcacctgaa
                                                                     1320
gtcaggagtt caagaccagc ctgaccaaca tggagaaact tcatctctac taaaaataca
                                                                     1380
aaatttggtg ggggggggg cgcatgcctg taatcccagc tactcgggag ggtgaggcag
                                                                     1440
gagaatttet tgaacceggg aggeggaggt tgeggtgage caagtttgea ceattgeeet
                                                                     1500
ccagcctggg caacaaaagg gaaactccct ttcaaaaaaa aaa
                                                                     1543
```

```
<211> 2279
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1678)...(905)
<223> similar to gi5902376 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

·<210> 5057

```
<400> 5057
ttttttttt tttgatttta agtcctttaa tttattttga atatcagtaa ttacattttc 60
aaaatatgat ataatttaaa ggtatcagta ccataaatct gtatcttaca gtaggaaatg 120
taagagtaaa cagcctatat acactttgta ctactgacac aattttatgt atacaactct 180
```

```
atacagtate tactaatete cagaaaacee acetacaate catetgtetg ggaetgtggg
                                                                      240
caagtgggtt ctttctgaga tcagggtctc actctgtcac ccaggttgca ctgcagtagt
                                                                      300
gcaatcatgg ctcactgtag cettgacete etgggeteaa gtaatcetee catettigee
                                                                      360
teetgagtag etgggactae aggtacacae caccatgtet ggatacattt tgtatttttq
                                                                      420
gtagacaccg ggtttcacca tgttgcccag gctggcctca aactcctggg ctcaagtgat
                                                                      480
etgeetgtet tggeeteeca tegtgetggg attagaggea tgagegaetg tgeeaggetg
                                                                      540
actgtggaca agttttacaa ataaaccaaa ataaaaatat tctcactttt cagctgcaca
                                                                      600
tggtggaaat gtacatgtat gatgacaaag tcggagatat ttattacgct gaagacattt
                                                                      660
aactttgttc catgccagcc atgagtgaca acgctagaga ttccaaatgg ggaaaggatc
                                                                      720
ctctacagac ggctttgttt aaaatggtta caagaaacat atggcagttt ttaaaatcag
                                                                      780
attocatttt ototatagat tocattogoc aagtgoodag gootgootgo caacogtotg
                                                                      840
caaacatgag agccaagttc aacaccttca tgatagettc titcacaaag ctgacctttt
                                                                      900
ctctcagcag acaccggtca tggatggttg acagatacct atagtgaatt ttaatcaatt
                                                                      960
gatctaaatc cttggcttcc tcgacttgat gttgaaactc cagccctgta ctgtgtagaa
                                                                     1020
tectggteat gatgtagttg tgeaagetgt teacgaaatg catgagette actettaaga
                                                                     1080
ggaadatgeg atgaatetge tgtettaetg gttetttttg tggteegaad tgageaactg
tgtcttgttc atgtataagg ccttctttaa gtcgtggttt ttctgcagta ctaaccagtt
                                                                     1200
caccaaaaag taaaacatcc agactatatt ttgcccactt tatttgcaat aagagaagaa
                                                                     1260
acacttgatt ataaattttt tgacattcca aacttataac aatgtccacg ggccatggga
                                                                     1320
cettgtaget gagggteaga ceatetaaga tatgaacagg cagettette ttagetgtgt
                                                                     1380
caacattttc aaaagatata gatagacgtg aactatcttc aggataacgc tgtcctactg
                                                                     1440
cttcttggag ttggacatta agaaaagaca cattctgcca tgtttccttt tctcttattt
                                                                     1500
tatcaaaaat tgacgtgtag aagtcataca tggtatctcc tccttccatt aagaaaaaat
                                                                     1560
tecteatage tigeaagtat tetaceaace tgtaatetti tittagagit igeatgagat
                                                                     1620
ttccacagca atctagatac tgcttgtcaa tatgaggata gaggcaggat ctcagcgtta
                                                                     1680
atticaaaagt ctggcatgte acagatteeg atgatetate cacacataca teaccaccaq
                                                                     1740
caaacttctc gtgaaagtca ctctgctcca aatacatcct tgcaaagtta atggcaagca
                                                                     1800
gtggatcatg aacatcatcc agttcaagat ggctttcagc aatggactgc atcttcatca
                                                                     1860
ggtteteett ggttgeetgt tgeteagtaa gaacetgtgg agtggaatet tetecatqte
                                                                     1920
gaagacggga ctgtacagat tccagaaaga gagtgtataa actttttctt tctgcatctc
                                                                     1980
tggctcctgc ctggcaggtg gtgctctccg cacactgcag gttcttcagc agctgcateg
                                                                     2040
acttgccage cattatgate tgcttcagga caggtttgag gaaggacace atggtgtgct
                                                                     2100
gcctgctgga gggcccctgg tcactgccgg aactcgcact agcgttatca ctcattttt
                                                                     2160
etteattte tgtetttet gataegetat ataaegtgta agttgeatae eagaagtete
                                                                     2220
tgtgattaac tggaacattt ttgtttctct ggatgatgaa ctccctggcg ccatcccac
                                                                     2279
```

```
<210> 5058
<211> 646
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(321)
<223> similar to gil850831 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5058

cgttggactt ggattatcaa aagtggagca gttccagcta tccatttcca cggaagtcaa 60
gaaaagtatt gacatacctt gcaagatatc gagcacaagg tttgaaacag atgtcattca 120
```

```
ctggtaccgg cagaaaccaa atcaggcttt ggagcacctg atctatattg tctcaacaaa
                                                                      180
atcogoagot ogacgoagoa tgggtaagao aagcaacaaa gtggaggoaa gaaagaatto
                                                                      240
tcaaactctc acttcaatcc ttaccatcaa gtccgtagag aaagaagaca tggccgttta
                                                                      300
ctactgtgct gcgtgggatt acaccatact agaactgttg aaacaacatg cacaaaatcc
                                                                      360
cctcccaggg tctgtgccca ccacatcctt cccaacaggg gcaaccacag ccagtcccca
                                                                      420
qctqqqctcc caqactcaqq ctcgccttct ctqaqqctct tccqqqqctt tccaqqaaqc
                                                                      480
tgttatgggt tatacetteg tteccaeetg ateccaggae ttgtgeteca gaatetttat
                                                                      540
ttgacactgt ttcttaatgc attaaagact tgtctgggga ctgagagaac ataggtcgtg
                                                                      600
ccactgtcca tcatatcacc acctagagac ttccagtaag tagcaa
                                                                      646
```

```
<210> 5059
<211> 481
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (469)...(273)
<223> similar to gi2266432 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5059
ttttttttt ttagctcatc agctatcgtt agggtatttt atgtggccca agaaaattct
                                                                       60
tettcaaatg tggcccaggg aagccaaaag tttggacacc tgtgatttac aggttatgcc
                                                                      120
tagatetgaa acagatecee ateceteeta aagetgeeca etggttatgg geeetgttte
                                                                      180
tettagaaac accacaca teatttggga aaagcacact gagtagaaac atggeetgaa
                                                                      240
agggtggtgg gcggtggacc tggcttcctg tggccagagg tcagcggacg atagaaatgg
                                                                      300
tctgatcggc cacagcaaag actggggaag attgggcccc gggaaggaca cattgattgg
                                                                      360
gcacagagca ctgtgccgga ggctggctca tagaagagca gctcctgaac ctgcaagtcc
                                                                      420
ageactacae ecagetggge tgggeceege ageageeeca ggggetegtg etgeceattg
                                                                      480
                                                                      481
```

```
<210> 5060
<211> 1026
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1022)...(245)
<223> similar to gi4159885 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5060
                                                                       60
catattcaaa ccatctttat ttacaaaata ctatcctgag aactattatt ccattaaact
                                                                      120
tcaatttqaq caaaagtgca atcacttaag taatagcagt tacttaaact gaaaatgaga
                                                                      180
tcaqtcaaaa ttacttttga agaaagcaac aatattgtca ggtttcttgc tgtggttctg
gatgtccagt agcaggctcc tttgaaggcg gaatcaatcc tgaagggaac tcgcttctac
                                                                      240
ctttagaatg tggggttggg gtaaaatcca ggtctcggat gaaggtaagg aggtaaaccc
                                                                      300
                                                                      360
ctcggtggat agatgtttct cattgcaaat ggagcatgtg gtggacctgg gaaatccctt
ggtggaaaat aacctcgaga agctccaaac atggttcctg gaggaggtgg ggggaaagga
                                                                      420
ggtcctcttc tcatgaacgg gccccttgta tccactggaa acaatggacc gctgattgga
                                                                      480
                                                                      540
gcaagaggtg gaggaataag gccagggcca gttgcttcat tttcagcagg gagagatgaa
teaggeacat ttaaattace aagateatet ttggeateat ttetaetgga tteeatttet
                                                                      600
gaaggcattg acctatccat tttatccaaa gaagtcattt taaaacttct gggttctgct
                                                                      660
ggcccagaca gtctttcaga attagaataa aatctgtctt ccctttgtgg aggaagagtt
                                                                      720
gaatcaggat atgattgccc tggtggagga aacatcatcc tacggtcctg ttccaccgga
                                                                      780
gatgacaggg acccagtgtc agaaggagcc ctgtgaggat cgattaacct gtcatagctt
                                                                      840
                                                                      900
ggttctcctc tttcattggt aatctgatgg tccaggggat tccctgggct gcttgggcct
cttcctcctc cccctggaag cacaggtgag agtctgagtg gatcctccaa caaagtttga
                                                                      960
ggagagggaa aagctetegt tteagatgaa ggeegaeeea atggtgatgg aetagatggg
                                                                     1020
                                                                     1026
caaata
```

```
<210> 5061
<211> 572
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)...(205)
<223> similar to gil304434 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5061
tttttggget cegggaceec egggagtggg ageggcagte ggggaegeet caactegtte
                                                                       60
actcagggaa teetgeecat egeettetee aggeegaett egeagaaeta etgeteeetg
                                                                      120
gagcagccag gccagggcgg cagcaccagc gccttcgagc agctgcagag gtcccgacgg.
                                                                      180
egecteatet eccagagate tteettggag accetggaag atattgagga gaacgeeect
                                                                      240
ctccggagat gtcgaactct ctcaggttca cccagaccaa agaattttaa gaagattcat
                                                                      300
tttatcaaga acatgeggea acaegatace aggaatggea gaatagteet tatcagtgge
                                                                      360
agaagateet tetgtagtat attiteagtg etgeegtate gegacagtae eeaagteggg
                                                                      420
tatgtatatg catgcatgct ttgtagttct ctgggtgaaa agatctcaca ccaatgtaca
                                                                      480
taatgtggcc atcettteca ttttcaagaa gttgeettge tttgataetg caaatteagt
                                                                      540
atttgtacac tggaatgata aaaagatgtt cc.
                                                                      572
```

```
<210> 5062
<211> 881
<212> DNA
```

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (116)...(643)
     <223> similar to gi2792494 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5062
cgcgtggggg ttttatatgg acctttggaa ggctgtttat ttacccaatg gaagaaatcc
                                                                       60
tteatttetg atttegaget ggeategtga cacatttgga ceteagaaag actettetea
                                                                      120
agttgaggag ggggatgatg ttettgacaa attacttgaa aacattggee atacaagtee
                                                                      180
tgaatgeett ttacegteac agetaaatet aaatgaacet teeetaacee catgtggeat
                                                                      240
gaactatgac caagagaagg aaatcattga ggtcattttg cgccaaaatg ctcaagagga
                                                                      300
tgagtatato cagagtoata acttogatto tgoaatgaaa gtoaccagoo aagggcagoo
                                                                      360
ctccccagtg gagcctcgag gaccctttta tttctgcagg ttattgcttg atgacttggg
                                                                      420
aatgaattot tgggacagaa ggaagaattt tcatctattg aagaaaaatt caaaattatt
                                                                      480
gagagagetg aaaaatttgg acteeegeea gtgeegtgag acacacaaaa tegeagtgtt
                                                                      540
ttacattgct gaaggtcaag aagacaagtg ttcaatcctc tctaatgaaa gaggaagcca
                                                                      600
agcatatgaa gactttgttg ctggacttgg atgggaggta atgcatttca ttcaggaggt
                                                                      660
gtttattgac cagcactgtt taaagatgtg tccaaactag acattgtgta agtttttaca
                                                                      720
tgtgcttttg cattcaaata tagcatagat agagttctgg aattgaagaa tttattggat
                                                                      780
ttgacatctg ttagttgctt gtcagtattt aatacatgaa cttttgtttt cctttaactt
                                                                      840
tectettaat attitteat tigettitta teagaaciga a
                                                                      881
     <210> 5063
     <211> 2941
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (15)...(472)
     <223> similar to gi4689112 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5063
tttgggagge tgaggatgte agtgggggag gacccgcacg ttettaccca gttggaggee
                                                                       60
tttgttacta tctttctcct cctgagtcca tgggcgccat ctttgaggat cctgtccatg
                                                                      120
tegttgttta tateatette atgttggggt catgtgeatt ettetetaag acatggattg
                                                                      180
aagtgtctgg ttcctcagcc aaagatgtag ctaaacagct gaaagaacag cagatggtaa
                                                                      240
tgaggggcca ccgagatacc tctatggttc atgagcttaa taggtacatc cccaccgcag
                                                                      300
ctgcgtttgg cggtttgtgc attggcgccc tgtcagtgct ggctgacttc ctggggqcca
                                                                      360
ttggatctgg cactggaatt ctgctagcag tcactattat ttaccagtat tttgaaatat
                                                                      420
ttgttaaaga acaggccgaa gttggtggga tgggtgcttt gtttttctaa atgttcaaat
                                                                      480
```

540

600

atttcatttt gtgcgtgtga aagggaaaac actttgacgg atcgtttttg tcagatgaca

ctggtggctc cccttttctc ccctcacagt ttcttgtttc gagtgctgac tgacccgttt

```
ctgaaatqqq caccgagcta agtctgtgtg cagcattagt acccgctgcc ttaaaactca
                                                                      660
agtttacatt attcattaaa aaaagtacat ctagtgttgc ctgtaatgct ggaaaccagt
                                                                      720
gtatctacct tgctgtgtta aatcatgaca gtgagacggt gagatggatt cgttttgcac
                                                                      780
acaacattca aaacacttca tattgccccc acttgttgaa aaataaatgt agttcaaatt
                                                                      840
gecaetttee agtatttttg agettattta atgagttetg gaacatttat atetaateta
                                                                      900
tattttagat aattactttt tatacttttt taactcatgg tatccccact ccccacccc
                                                                      960
acctcatttt tatttgtccc ttctcaaagc agccacttag cccacatggg cgaaatcaag
                                                                     1020
tetecagita titetgecae aactgettet aaggeeteet cetteteete etectettee
                                                                     1080
tettectect ttteettete etecteetet etteccagtg acageateat egtgetgttt
                                                                     1140
geetgtattg getatgeett etaacteeaa eeagteaett gagaatatte ttteaagatt
                                                                     1200
ctgggccccg attetttet gtttaaatcc ctaaagcaaa gatetaatte tcaagcaatg
                                                                     1260
tetgtagtte agtgggggtg aacaatgaat atatteatge taggaatttg tgtetgttgt
                                                                     1320
tqtactcaca gcaqcaacat gagtgtaaac agtagacaat aaacttttat ttaagaaaac
                                                                     1380
tgattcagtt gtgttggaaa aaataaagaa atctgatatt aaacgttttc taagatcatt
                                                                     1440
tgtataggtt cagtgtattc ataagaagtc caccetgaga tgcctgtaaa agtcaaatgt
                                                                     1500
aattacactt caaactttaa tootaaatta ttgacagata gatagatagt gaccaactta
                                                                     1560
agggtaatca tatatgtgac taacatttgg gaggaaacag gaaaacagtg gtctcaaaac
                                                                     1620
aacaatatcc cagtctccat ttgaaagagc atagatcttg gtaaatcatt ttgaaaacta
                                                                     1680
tgtgctttat ttcccaaaag atcaaactta atttttaaaa gacacccttt tcagaagtat
                                                                     1740
gggttttcat tgctgtttag tttcttaggt gtggtatgtc ttacgtagct tatgcttaca
                                                                     1800
aagccaaata atcgcagggc aaggcagata aaggcaggca ggatagtgac agtggctcgg
                                                                     1860
tgagcatccg ccaagggcct cagaccactg ttaccataaa aacatccacc cagtgttatg
                                                                     1920
acgtccgatt tttttttccc ttaagaaggt ggaaatatgg cttttaatac ataggaaacc
                                                                     1980
ttcagttttt aaatgcaggg caaataaaca tttttaaaca gtgccagcca gactgccagt
                                                                     2040
totcaaacag actgaattto caaagcacaa cottttoatg tttataaaaa atagaaatgg
                                                                     2100
catttaggga tacattctag gatttggctc tgacttctaa gttgcactct taggaagaag
                                                                     2160
gagaggataa gettaggtea getgeagagg teatteecat ggggagtgge tggggaggaa
                                                                     2220
ctgggctatg tggaaagact gggctgcgcc cgtctacgga tgccttctct cttgatttca
                                                                     2280
atgattgata gcatgtggct ttcagaccta aggaagagtt agagctttgg agaatcacaa
                                                                     2340
tgcctgtgat tgaaatcagg atttaaaaaa gggttagagg cataggggaa ggctaccatt
                                                                     2400
acaggaagta gttggatett aatttteaca tgtataggge tagacagett catetgtaaa
                                                                     2460
gttctgtatt tccataattg ttttatcttt aggaagtcca gtgtaaagat cttacagttt
                                                                     2520
cactcataaa aatatcctgg gctcagacag tgagcctgtg gacaaacgga ggctactgca
                                                                     2580
geattetgge attageacte tgattttate tggagagece ttteatatgg tteteaggge
                                                                     2640
ctggcttacc cgctggagcc aggctagaaa catgacttag ggctggatga gaatcatcct
                                                                     2700 .
gagaatteeg tgggggeeag aetggaaagt cetggaaaat catggagetg etggaggeee
                                                                     2760
taaaagtcaa cacaaaaaga gctaaactca ctcaagaagc taagaaaatg gcccaggaac
                                                                     2820
actggtagaa ctgctagatg acagggtttc aggcatggga accagatcaa tctgtacttc
                                                                     2880
ttgctgtgaa ctactctgta ttgggtttca ggtactggct gatcttgctg gttctgttca
                                                                     2940
                                                                     2941
```

```
<210> 5064
<211> 3447
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3448)...(706)
<223> similar to gi5911875 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5064 60 ttcatgtgcc catcggaggg tacatatcag tctatttttt attataaaca aataaaagat taaatcacac atcaaagacc tagactcctt ctctgagaca ccaaaggcct aacaaccagt 120 aagataattt tagacaattc tattgaaagt tattcaaaag gcatcaagtc aaaataacga 180 240 aactgcccca gtaaaaaggg gctgggcctg ggggccaggc aaaggcaagc atgagggccc cagtagaggt ggacetgtee etatggtaac tgagetegge tttaaggeea ggeattgggg 300 atcagetget aggageeeac etgtgttett eetgaggggt gggggeaeec tagteaettg 360 420 cettagagge acatgggtee eccaccagee tacageatgg aaaacaceca atgtetgget ctagectatt ettaacecae ääaetgggat tgggagetgg ggacaggaag aaggggteat 480 ggggccagga gcctattcag gctctacaac cagacttccc tagagaggcc ccgtgccagt 540 tagtccaatg gccacacaca tcagaaaggg tagtcaacag cgttgcacat gtaggttgga 600 ggtagcccag gtgtcagcca caccctggtc acagcagatc cagagaggca atgttccttg 660 gagetgeagg etgetggate tactgetegt ceagteeegg geteagaeae agggtaagte 720 780 ctccaggccc ctacccaggg cctgccctga cacacagetg ctgtcagagc cactggagcc actggctgat gggcattggg acgagatete tgagteetea geagteaaag agggetggee 840 geceagetet geeteageet eeagtgetge tteetetggg aagetgggat acaggggaea 900 geggagaece agaagagetg ggtetetgta caggtgeagg ttgagggaec ceagaacaga 960 gcaagaggca gggtctccag gaagggagtt cgaggccccc aggtagaggc tgtcatggtc 1020 aaacggggct acggcaatgg acgcccgaga gcgaacttct cggcacttca ggacatagtt 1080 1140 gacggtgcgg tcgttgatgg cttcctcgct gggagcaatg tctcggaagg ccttgttccc cacacccatg gacaccatct cagccatgcg cacctccttg ttgtggacgg cctgcctcca 1200 aagcaggtgg gagatgtcag ctgtccaggc ctgcttgata gccaggctgg aggcctgcag 1260 cacaaaggtg tecetggeet tgeggeggeg gaaceagate tegaagegea ggttgetgtt 1320 cccacagcac tcagtgagac caaggtctgc catcttgaag gagcgcttgt aggcaaatgt 1380 gtcaacccct gtgggcccat ggcgaggctt gctgaagagc agcagctcct: caaaaaggaa 1440 gatgeggege aeggaettgt ggegeeeagt gegeaeeaea aacteateet gtegeaeeag 1500 etgeceetgt teettgaggt taacateaca gecetggatg gegteeatgg ceageaggte: 1560 gtttccgtgc cgcagctgga agtgcacaag gctctgggcc tcccgcagcg cactgagctc 1620 ctgcgtgggg cccccgcagg cccgtgccag ctcctgcagc agcagtgcgt acttgcccat 1680 gegetggatg ggetttagea ggtaggagge caggtecagg tggtececca gtgettgetg 1740 cttgtccttg aagaaggtgt gcccatagct tgacatcagg gcatcggagc gaggcttatt 1800 cttgctgtag agcgcgtaca tcccaaactg caccetatgg cgcaggaagg cataggccac 1860 tegtggtggg tgcegggtge aageeteeag eteaegeagg aagaagtgge agtggaagte 1920 cegcagette tecaggitige caaagaggitg ggeacgetga cegeggagge cetggggeac 1980 atcggggcga tccagctcgg ggaaatagtt ctccatagtg tactctagag cccggacata 2040 ctcccgctcc gtggccacca tctctgccag caccagetgt agectgttga ggctcctggg 2100 gtcagagetg cetggtggag gcacagtagg ggatgcetgg ggcagggcac etcetceage 2160 ctctggtctg cggcaggcag caatagtggc cgcatggtgg cagtggcagg caggttcact 2220 gagactetge eccagattee gategaaget gtaggeette etcaggggag ggtgggeagg 2280 tgcagcgggg acctggctga cacacaggct agctgtgctg cccaccggtg gtagcttcag 2340 tgaagcetca agettttggt ccagggecag ccaggtgtee tggcaeegeg eccaggeeca 2400 geggeactee tggeggatgg cetetgagee cageceegtg geeagageee acatettteg 2460 gaagtgggca ggaggcaagt cagggtgcct ggtccagtgc agctgcagct gctgcaacac 2520 aacccccggg cgttcctgct ccagctctgc caacactcgc tgcccctcct cagcccacgt 2580 caaggeetee etgaagaget gaaacageet eteageatee geeageeget ggeacegetg 2640 ggccaaagcc ctagagaatt cagtcagctg ggctcgcagg gccagaaagc gtgccccagg 2700 ggggtccagt tcagccgcct cccagccagt cagcggctgc agaaacttct ccccttgcct 2760 gacctgctcc tgggcaacct ggtacagctc ctgaaaagag ccttgggcct ggagcagcat 2820 gtccagcgag ggctccccag cctcctccag tgctggccag cccacctgct gcagccacac 2880 ttcaatctgg tgcagtccgc tttcccgggc ctccagtgtt tggaccaact ctagggcctg 2940 tattcgctgg ttgctctgca gggtcagttg gtgcagcaat ccatccaccc ggtcatatag 3000 ctegicagee tigiccattg cegicetgia gietgggete agggicaeet etgggacete 3060 ttgcttcagc catgtcagct cccggccccc ctggcattgt agccatgcca gccatgcga 3120 gtctagcacc tgctgcatca ggacctctgt ctgctgtagc agctgaccga cctccccagg 3180 ctccatgggc tggggcacag ccttcacact ttcgatggcc ccctggagca gggcacaagc 3240

```
tgcctggcag ttctgtagta gagettccag eegeettegg aaatecagee aggeetggtg 3300 geagtaagge aggeeteete etagegaagt gggcageeee geegttggga tgtgggtcag 3360 eaggetetga gaaggcaact getecagetg eageeeggaa ggeaetteet teageagegt 3420 getteceact ageageacet ggtacae 3447
```

```
<210> 5065
<211> 467
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (46) ... (165)
<223> similar to gi2439972 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

### <400> 5065 attattagta cagtgoggtg gaattoctac cocattocca tattocagat cotgtgtato 60 gatgaggeca cagcaagtgt ggaccagaag acagaccage tgetecagea gaccatetge 120 aaacgctttg ccaacaagac agtgctgacc attgcccata ggtatgtaaa cgcctggtaa 180 cagectaate agggactgtg gtageatgea eegagageet eegttgettt cagggaceee 240 agtggtcagg gccttagaga tcctgcccc ccagatetca gctcctcctt ctccagggac. 300 gagaagggte etttatagea etgeetaggg ceetttatag cacattatet gagggeeett 360 tatageactg cetagggeee tttatageae attatetgag ggaetetgea gteeetteee 420 cagcaccaag ccaggggcta aagcctgtgg ggacagacct gtggtgt

```
<210> 5066
<211> 1229
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(579)

<223> similar to gi3599942 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5066
gagaagcaga gctgtaagag ctgtggtgag acctttaact ccatcaccaa gaggaggcat 60 cactgcaagc tgtgtggggc ggtcatctgt gggaagtgct ccgagttcaa ggccgagaac 120 agccggcaga gccgtgtctg cagagattgt ttcctgacac agccagtggc ccctgagagc 180 acagagaaga cacccactgc agaccccag cccagcctgc tctgcggccc cctgcggctg 240 tcagagagcg gtgagacctg gagcgaggtg tgggccgcca tccccatgtc agatcccag 300
```

```
gtgctgcacc tgcagggagg cagccaggac ggccggctgc cccgcaccat ccctctcccc
                                                                      360
agetgeaaac tgagtgtgec ggaccetgag gagaggetgg acteggggea tgtgtggaag
                                                                      420
ctgcagtggg ccaagcagtc ctggtacctg agcgcctcct ccgcagagct gcagcagcag
                                                                      480
tggctggaaa ccctaagcac tgctgcccat ggggacacgg cccaggacag cccgggggcc
                                                                      540
ctgcagcttc aggtccctat gggcgcagct gctccgtgag ctgagtctcc cactgccctg
                                                                      600
                                                                      660
cacaccacca cattggacct gtgctgtcct gggaggtggt gttggaggcc ccatgaagag
cgccctggac tgctgagggt gggccaacag cccagagctc aggacacttg gctttggggg
                                                                      720
gaaggaaact gaggcccaga gaggggcaac cactggccaa gggtcaccca gcaagttttg
                                                                      780
gctaagagcc tggcctccag ccccagcagt gtggcccaga gcaggggccg actgccaaag
                                                                      840
taaccatcat ccatatgggc cgtgtggtga tgctggcccg gaaggcagaa agaggcagca
                                                                      900
tgggcactgc cagggacagc cacatcetgc tggtctgcag cgtggtccac cccgcctctg
                                                                      960
cccagcctgt ctacaccgtg tgagctgaat cgtgacttgc ttcccacctc ctttctctgt
                                                                     1020
ceteteetga ggttetgeet geageeecca ggaggtggge etgeeecate etagetggae
                                                                     1080
teatggttee taaataacca egeteagaag etetgetagg aettacecea geeactgagt
                                                                     1140
ggcaggcgca tgagatttgt ggctgttcct gatgctagtg gcacacagtg cttatctgca
                                                                     1200
taaataaaca ctggccacca aaaaaaaa
                                                                     1229
```

```
<210> 5067
<211> 525
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (76)...(205)
<223> similar to gi2286147 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5067
ataggggagg cgtgggcact tgtagttgtc ttaggactga tgtctgaatt aactaaggga
                                                                       60
acttgtctgg tttgcagagt gctgatggca gagattggtg aggatttgga taaatctgat
                                                                      120
gtgtcctcat taattttcct catgaaggat tacatgggcc gaggcaagat aagcaaggag
                                                                      180
aaggtgagtt ttettetttt ggtteatgge eecaggagee tateagaagt gggagetaet
                                                                      240
cttgttgata cagagaggg gaagcaggca gtctgccgcc actatagtgg gagtcagaca
                                                                      300
teteaggtgg ettttaaaca acatgaatgg gaagagaatt ggtttatgaa tigaagaaat
                                                                      360
aggattataa catettetgg tgtgggettg gatggttett teateettgg aatttateet
                                                                      420
tgtttctgta aaattcatag gtctggctca tatgagcttc cctccctggc ttgatgggga
                                                                      480
tgtggggaag acatcccatc tgcttgtgct gagggaaaac aggag
                                                                      525
```

```
<210> 5068
<211> 1065
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (1067)...(869) <223> similar to gi404650 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5068
ttttcacaca tataaacaag tttattagat tgtcagtgat actttgagac aaattcaagt
                                                                       60
tatttcattt tacttcatat aaacagagga agggaggaaa gttttaaact tcaagctttg
                                                                      120
ttcagcatgt gtgcagttag catccacaaa agcaccattg ggtatgggag aattagcacc
                                                                      180
acagaatttt aggacctaac tgttaacatg catcactgaa aaacttggaa cataaaaact
                                                                      240.
gaagtagtac gtggtatggt ctattataaa caatacaagg caatttatga tttgttctca
                                                                      300
tacagtacaa tacaatcaca ataaatgaga accttttaag aacaatacgg gacaaaaacc
                                                                      360
accttgcacc ctgttaacac taaagcagtt acagatttaa aaaaatgttt ctggtaagag
                                                                      420
gcagtgggtt gaaattatcc ctccccctc aatttttaaa ttcagagtta tatagttaca
                                                                      480
tgatetetta agaaagtatt tteaaateta tatgtetete taeeteaagg etgacaaatg
                                                                      540
gtggtttgaa aacgaaaggc ttgatgaatt aaaaaaaaca aaacccaaaa actggataga
                                                                      600
gtcgaaaggt acttcaatgt ggtggaaatt attcaacata agatcagttt ggaaatgatg
                                                                      660
ccagtggtgt tgatacttgt cttcccttcc gtggaggaat gtcaagtact gaggccttgc
                                                                      720
atteatgatg aactteagtt catttettte accgaatgee tttattetga ggtgtaacat
                                                                      780
aagagattta ttoottatto otcaactgtt tttgtagtat catggggctg ttoottatgo
                                                                      840
ttgatttgac aacagtgaaa aaggttgata ttctctctgg atttggggta atttgtgagc
                                                                      900
ttcaggaaaa ttccatattt attagagccc acatcaaagt agaacctttt attgtccact
                                                                      960
ctgaaagaag teceetetgg gagtteaage gggteategt etecaeetet tegttettgt
                                                                     1020
atgtctcctt cgccatagtc ttcaatcaaa aaaaccaagg catca
                                                                     1065
```

```
<210> 5069
```

<211> 974

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (8)...(484)

<223> similar to gi2992628 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

#### <400> 5069 ageggeegeg atgggtggeg ceatggteet getetatgee ageegggeet getacaaeet 60 gacagcactg gccttggccc cccagagccg gctggacacc ttcgattacg actggtacaa 🔍 120 tgtgtctgae caggtgggca taegeatgte tgccaectee ttagtageeg tggcaecttg 180 gccccagctg gcctgggccc ttgtcccact acccctttgg cgtgactgca gactggcacc 240 agcccctgcc ttcccacagg cggacctggt gaatgacctg gggaacaaag gctacctggt 300 atttggeete atectetteg tgtgggaget actgeecace accetgetgg tgggettett 360 eegggtgeae eggeeecae aggaeetgag caccageeae ateeteaatg ggeaggtett 420 tgcctctcgg tcctacttct ttgaccgggc tgggcactgt gaagatgagg gctgctcctg 480 ggagcacagc cggggtgaga gcaccagtat gtcgggcagt ctaggctctg ggagctggta 540 tggtgccatc gggcgtgagc cgggctggta tgggggcagc cagacgaaga ccactcctct 600 getettetee caggtgecag gaccaggegg ceaceaceae agtetetaet ceaceceaea 660

```
gacgtgatec cectecetec cecacagaat acceaggee cagteceet caccetagge 720 cectgtgeea agtitigitet cegettette cecaggatec tigggggtegt ggetaceeec 780 tectetigge ggeteettige tigeteetigie atagtgaget tigtgeegtee cectaggate 840 gggggeatgg cectggetge cagatgeea cagaaceetg geatgacetg ceacetetige 900 tecacacagagata ceteteetigt geetgeeaet caataaacag tigtetigege 960 ceacaaaaaa aaaa 974
```

```
<210> 5070
<211> 2398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2120)...(1639)
<223> similar to gi3881700 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5070 ttttttttt ttagattatg tatatgaaaa etaatttatt aaacetetgt acacaaagat 60 gaacatacct gtatagcaag catatatgaa ggatgaagtt acaaaaaagt aaaagtatta 120 ctaaaattga cacatgtaaa toacttacaa aaatacccca aatgggataa agctgctcat 180 ccctgatttt tctcatttgg ttgtaggagt tgaaacatga atttaaaatg gtagaatttt 240 ttottttaaa aagtgatata ttaaacttat atacaggata attagcaaaa tgtagaaagg 300 gaaaacaatg tacaaaagac agataaaaac catcactctc gacggatagt cacaatccaa 360 aaatagtata aacettaaca aaceetetet aaaceaggte atatteacat etecceeda 420 gttttgtcag tgagaataaa atatactgaa ctagtgaget cagtetttet ttaaaatagg 480 ettgaetttg gaacatgaac ettggataga tttttaaaca tgggagggac aaacaggaaa 540 accattetat etatecaett aattagtaet aattaaegga acaaagttat taaatagete 600 tcagtgctaa gtcaagccat tattcagagg cctttttgtt tttctgctgg tttcggggtg 660 agttetttaa eaagettett ateetgaggt acattecagt agattetgee atatteteaa 720 attcaaatgg cgtgattcca gttgcaaatt tgctcatgtc aggtataggg ctatgaattt 780 tagtggccgt tgaaggactg gtgtctgcag gaaagagctt ctggctgccc ccattgctga 840 tgtcacagtt tggtacgaca ctgccattat caagaagggc accttcagtg tttaccggag 900 ccaactetge tittteette tgacaaagtg atgtcacete agagtetgga etggaggeat 960 gtccagcttc tgatttcttt gtaaaaatct ctggtacctc aggctcatcc agcgtctgct 1020 tttcagatgt ttttccctcc gggacaggga ggtctagctc atttggacaa ggtgatgagg 1080 / caacggaatt gcccagttaa aggtgtgtcc cacaggaacg tcggaagtcg ctgttttacg 1140 etecteggee tgeteaagag etgeceeaga teegeetetg etgtteette eeagttette 1200 1260 tgggagtcag cggcggggtg ccctttggga gtggagggt gaagacgggt ggaggagttc 1320 cccgggggag tggaggagtg tcaggaggta atggtggttg aaactgaaaa ctttcgctgc 1380 totgagaaco atgtggtaco tocatatotg aatcgagoto catgtoggog ggagatocog 1440 ctgagttgct ttcattcttc tgcttctttg gactacctgg gctagagtga gatgaagacc 1500 tettgttgee agaetteaea eetggegett ggaagttaga agtaaggtaa ttggeaaaea 1560 catcettetg etgacatgee tgeattggta tggaaccaaa gatcetecat tegtetggaa 1620 ttcctctggg agtagatata ttaaaaccag gatagttgac caattttgag agatcgtaag 1680 tgacactttt attetgttgt atttetecaa ettetgttte eccateagtg ceatetttte 1740 catcatagag tgcaagcccc gaatteteca atteageete tttgageeac cetggtgggt 1800 accetagetg gegeateega tagataaaag gtggaagaet ettgtetgte acacetagtg 1860

```
catcttgaag ttcctcacta ataactcctg gcttgaatct tccaaatctt tcttctactt
                                                                     1920
cttctgcgtg gtatcgctgc tggaaattct gattgtttgc ttctccacag gcatccatat
                                                                     1980
actictitict ctittcactt atticgaging cattlegagg cattigggina totttcattt.
                                                                     2040
ggtgttcttc agaaccacaa ttgagacagt gaggctttgg cactgaaagc ttccttgttg
                                                                     2100
tttttaatgg cacaggactc ttccactttg tggtcctcct ctagcacaat actggatggt
                                                                     2160
ttgaaatage attgtteatg aatagaatet gtaatatagg teeatetaae ttagtategt
                                                                     2220
tcaccaatat tccactcggt cgagtcagaa tgctcaattt tcgtttaagt tcttgattct
                                                                     2280
eggegeggag etgetegatg gteteetege actgeegaag eegeteeegt ageteegegt
                                                                     2340
egeegaeeee attttegtee teetagtege egtegtegte ettgaagega gtaegaaa
                                                                     2398
```

```
<210> 5071
<211> 778
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (103)...(605)
<223> similar to gi3395780 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5071
ttgctgccgt ttaaagctgc ttcagaattc atcctaggga agagtgagct gggacaagaa
                                                                       60
accaccett ettteaatge aatggtegtg aacaacetga eeeteeagat tgteeaggge
                                                                      120
cacattgaat ggcagacggc agatgtaatt gttaattctg taaacccaca tgatattaca
                                                                      180
gttggacctg tggcaaagtc aattctacaa caagcaggag ttgaaatgaa atcggaattt
                                                                      240
cttgccacaa aggctaaaca gtttcaacgg tcccagttgg tactggtcac aaaaggattt
                                                                      300
aacttgttct gtaaatatat ataccatgta ctgtggcatt cagaatttcc taaacctcag
                                                                      360
atattaaaac atgcaatgaa ggagtgtttg gaaaaatgca ttgagcaaaa tataacttcc
                                                                      420
atttcctttc ctgcccttgg gactggaaac atggaaataa agaaggaaac agcagcagag
                                                                      480
attitigting atgaagtitt aacattigcc aaagaccatg taaaacacca gitaactgta
                                                                      540
aaatttgtga tettteeaac agatttggag atatataagg ettteagtte tgaaatggea
                                                                      600
aagaggtcca agatgctgag tttgaacaat tacagtgtcc cccagtcaac cagagaggag
                                                                      660
aaaagagaaa atgggcttga agctagatct cctgccatca atctgatggg attcaacqtg
                                                                      720
gaagagatgt gtaaggccca cgcatggatc caaagaatcc tqagtctcca qaacqaaa
                                                                      778
```

```
<210> 5072

<211> 1824

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1) ... (1825)

<223> n = a,t,c or g
```

```
<220>
<221> misc_feature
<222> (2)...(389)
<223> similar to gi4567180 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400>.5072
ccagagacac cacctggagg tgcaccagcg cagccacact ggggagaagc cctacaagtg
                                                                       60
eggggaetge tggaagaget teageegeag geageacetg eaggtgeace ggaggaegea
                                                                      120
caccggggag aagccctaca cctgcgagtg tggcaagagc ttcagcagga atgccaatct
                                                                      180
ggcggtgcac cggcgtgccc acactggcga gaagccatat gggtgccagg tgtgcgggaa
                                                                      240
                                                                      300
geggttcagc aaaggggagc ggctggtccg acaccagaga atccatacag gggagaagcc
ctaccactgt cctgcctgcg ggcgaagctt caaccagagg tccatcctca accggcacca
                                                                      360
gaagacccag caccgccagg agccgctggt gcagtgagca tagcaggtgg caggcagcac
                                                                      420
catcattcat ctttctcact gcagggcctt gcggggtgca aggtgatggc tgcaggaaag
                                                                      480
cactggteec ategeettee cacceatteg ccaacgeggg aaaggcaagg cetggettac
                                                                      540
ttagagette cagagageat agetgeetee atetettace caagtggtge taaacaattt
                                                                      600
ttetteeaat gtttgaggga ageagtetee tgeggtteag tteaggetga gattttetee
                                                                      660
ttcagtggac tgtctgtgtc cccctgccga acaaagctgg gagtaaaggc aaaaccttga
                                                                      720
cacgtgttgg tagctgggac ctcatcttcc tgagggctct gtcttgcctg cagggtcata
                                                                      780
geteagacte tteccecace ecetetett tecatigaac aaacatttat tgaacateet
                                                                      840
ctgagcacct ggccgtggga atgccgtggt gaatgagaga ctagacgtga tgcctctggg
                                                                      900
ggttgtgcgt tggggatgca tgcgacagcc catgacccga ggcattctca gggtatctgt
                                                                      960
gctgtgtgcc cgtgagaaca tcttcccatg accactcctg ccctcctgcc ccgtgctgga
                                                                     1020
tettecetee eeagetggga tetgeteeca ggeaactgtg tgaattttae attatttgga
                                                                     1080
geeteatetg tgteaggeta taacatteta teeteatetg taaaaettee ceqtecatta
                                                                     1140
tteettgeac tataacaact gteaacacac caactattag gaagttagta ttttgetatt
                                                                     1200
gatcactgaa taaacatcag agtattttaa aaaacagttc tctagaaaga actgttataa
                                                                     1260
ttaaaatgag totgaaagat gaactotagt attaatgccc tatatttgat ggcactttat
                                                                     1320
agticataaa attaatitca ccccattcic attggaccca titcccaagt attiattgag
                                                                     1380
gccctgtaac aaacatgtca ggaactcttc tgggtgcttg agacacatcc atgaataaaa
                                                                     1440
tagggggaga agctgttgac ctcgtaaagc ttatgtctcg tggatgtacc tgatcttcag
                                                                     1500
aaccogtgga tattootgca aatcototgg gootgtatto attgotttgt cagcatottg
                                                                     1560
ccctgaaatg catttgtcac ctacctcttg ttactaaatg gtctctgccc tccagaccct
                                                                     1620
tgtcatccaa ggcactaggg gtcctggaca cccactgggg atgatgagct ggtagcnacc
                                                                     1680
tgttttgcat gagtgccaag tcaggaaaaa taaagatatt tgtaggcatt aaaaaaaaat
                                                                     1740
acatttettt aaaaategag aagatgeaat atttgtaaac tgttgaaget teettattgt
                                                                     1800
gccatcactt aagggtttca tttc
                                                                     1824
```

```
<210> 5073
<211> 2399
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(821)
<223> similar to gi31867 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5073
cttcaataca gtttttagat aatgcattta ggaaaaggtg gcaaactctc ctctcagttg
                                                                       60
atgacettgt ggagaaactg gteaagagge tggagtteae tggggagete aacaacaett
                                                                      120
acatetteta taceteagae aatggetate acacaggaea gtttteettg ceaatagaea
                                                                      180
agagacaget gtatgagttt gatateaaag tteeactgtt ggttegagga cetgggatea
                                                                      240
aaccaaatca gacaagcaag atgctggttg ccaacattga cttgggtcct actattttgg
                                                                      300
                                                                      360
acattgctgg ctacgaccta aataagacac agatggatgg gatgtcctta ttgcccattt
tgagaggtgc cagtaacttg acctggcgat cagatgtcct ggtggaatac caaggagaag
                                                                      420
geogtaacgt cactgaccca acatgecett ceetgagtee tggegtatet caatgettee
                                                                      480
cagactgtgt atgtgaagat gcttataaca atacctatgc ctgtgtgagg acaatgtcag
                                                                      540
cattgtggaa tttgcagtat tgcgagtttg atgaccagga ggtgtttgta gaagtctata
                                                                      600
atctgactgc agacccagac cagatcacta acattgctaa aaccatagac ccagagcttt
                                                                      660
taggaaagat gaactategg ttaatgatgt tacagteetg ttetgggeea acetgtegea
                                                                      720
                                                                      780
ctccaqqqqt ttttqacccc ggatacaggt ttgacccccg tctcatqttc agcaatcgcg
gcagtgtcag gactcgaaga ttttccaaac atcttctgta gcgacctcac acagcctctg
                                                                      840
cagatggate cetgeacgee ététttetga tgaagtgatt gtagtaggtg tetgtageet
                                                                      900
agtetteaag accaeceet ggaagagttt etgggetgge tttaagteet gtttgaaaaa
                                                                      960
gcaacccagt cagctgactt cctcgtgcaa tgtgttaaac tgtgaactct gcccatgtgt
                                                                     1020
caggagtggc tgtctctggt ctcttccttt agctgacaag gacactcctg aggtctttgt
                                                                     1080
teteaetgta ttettttat eetggggeea eagttettga ttatteetet tgtggttaaa
                                                                     1140
gactgaattt gtaaacccat tcagataaat ggcagtactt taggacacac acaaacacac
                                                                     1200
agatacacct tttgatatgt aagcttgacc taaagtcaaa ggacctgtgt agcatttcag
                                                                     1260
attgagcact tcactatcaa aaatactaac atcacatggc ttgaagagta accatcagag
                                                                     1320
ctgaatcatc caagtaagaa caagtaccat tgttgattga taagtagaga tacatttttt
                                                                     1380
atgatgttca teacagtgtg gtaaggttgc aaattcaaaa catgtcaccc aagctctgtt
                                                                     1440
catgtttttg tgaattctag gctggtgctg cactgaaata gagcagtaag cttgtgataa
                                                                     1500
                                                                     1560
aggecaatte caggtagete ttgaaggtga tagecateta etttecagtg getgecaace
acagggagtg ccagttaaca ctggaaggat taaggcaagg tcccttctct tgagactccc
                                                                     1620
ctctgagatc tgaaaaatga agtggcttag gaacatcagc agtgaagaac tgccaagagt
                                                                     1680
tggtgaaggt tgtctcttcc gagggccttc tgaagacagg gctcttgaac agacaagtgg
                                                                     1740
aagggctgta ccagggataa aggaaagaag tgcctgtcca gcagggagct tgaatttaag
                                                                     1800
ttccatgtat gaagtcattg gctctatctg catttttctg tcattctctt catttgtttt
                                                                     1860
                                                                     1920
aaggtggaaa attttcttac agttgatgca aagtatcaac tactttaccc taccttctcc
cettttagat gggttettee tgagttttgg agtettgtat gattateagt atteceetgt
                                                                     1980
caaaatcaaa tctattcagg tttcttcact gttgagaaca cctaaatgtt tttatttttg
                                                                     2040
agaagtgggg acagagtete actatgteac ceaggetgga gtgcaatgge atgateteag
                                                                     2100
ctcactgcaa ccttcgcctc ctgggttcaa gcgattctcc tgcctccgcc tcctgagtag
                                                                     2160
ctgggattat aggcacacac caccacgccc agctaatttt ttgtattttt agtagagaca
                                                                     2220
gagtttcacc atgttggcca ggctggtctt gaactcctga ccttgtgatc cacccacctc
                                                                     2280
ggcctcccag agtgctggga ttacaggcat gagccaccac gcttggctaa gaacacctaa
                                                                     2340
attittatgt ticitggete aaaaaccagt tecattieta atgitgteet cacaagaag
                                                                     2399
```

```
<210> 5074

<211> 2799

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (2800)...(697)
```

```
<400> 5074
                                                                       60
aggaaaaatg tcatttattc aaaatatgaa attttattat aattgatgtt taatgcaatt
cactttacga aggtttttgt ggttttccct aaaatttctg ttttaatgaa ggctcctgat
                                                                      120
catcctggat gtcgacaagt tttcttcttc atgtgacgtc tctgatgcac aataaactga
                                                                      180
ttagtttttc taaaactgat tatattcata gggtttcatc tcactctaac ataaagttta
                                                                      240
aqctaaacta cqtccattta actaataagc caaatttqta agagcttaac aqactataaa
                                                                      300
cttaactctt gctttaaagc aacaaaaaca aaaccctgat gaagacctgg aagtgaattg
                                                                      360
ttegttttte agaetetage tteettgaee ttgtgeteta tggttttgaa cacacaggae
                                                                      420
ccaagtttgc tgcagaaata acctccaaat ccatcttatg aaccaggaag actgtgaggg
                                                                      480
tttttctttt tttttttaa gggccaaggg taaatgtaat atttatcatt agcaccacat
                                                                      540
cccatggtca gcccacctg aataaacggc atattgggat ttttccacaa actatgagcc
                                                                      600
taatqaaaaa qqaaatqqat aaqqqaaaca aqttcccaqc ctatqtcaca tqaqtttctq
                                                                      660
cactatgtgt tatgtggtaa ggtatgcatt ccctcaggac ttcccaaatc cattacatgc
                                                                      720
tagggttttc tctctggtat gcattctggt gtgatgtacc ctaagagctg ccttacggac
                                                                      780
aaaagtttte ccacattcat cacattcata gggtttetec cetgtgtgaa ttetetggtg
                                                                      840
tactctgaga gttgaatttt gggcaaaagc tttcccgcat tcattacact catagggttt
                                                                     900
ctcccctgtg tgaattctct ggtgtgcact aaggtgtgat ttctgggaga acgttttccc
                                                                      960
acaatcatta cattcatagg atttctcccc tgtgtgaatt ctttgatgta ctctgagggt
                                                                     1020
tgaattatgg gcaaatggct tcccacatac attacattca tagggtttct cccccgtatg
                                                                     1080
aactetetga tgtgcactaa catatgactt etcagagaag gtttteecac atteactgca
                                                                     1140
ttcatagggt ttctcccctg agcgagttct aagatgtgct ctgagatgtg atgtcttgga
                                                                     1200
gaaagtette ceacagteat tacatteata gggtttetee cetgtgtgaa ttetgtgatg
                                                                     1260
tgccctgagg gctgaattat cagcaaacgt tttcccacat tcattacact catagggttt
                                                                     1320
ttccccagta tgaattctct gatgtgcaca gaggtgtgtt ctttgggaga aagttttccc
                                                                     1380
acattggtta cattcatagg gtttctcccc tgtgtgaatt ctttqatqca ctatqaqqqc
                                                                     1440
tgccttatag acaaaagttt tcccacatac gttacattca tacqqttttt cccctqtqtq
                                                                     1500
aattetetea tgteeactga ggtatgattt etgggagaaa gtttteecae aettgetaea
                                                                     1560
ttcatagggt ttctcccctg tgtgaattct ccgatgtgta ctgaggcgtg tcttctggaa
                                                                     1620
aaaagttttt ccacattcac tacattcata gagtttctcc cctgtgtgga tattctgatg
                                                                     1680
tgctctaagg gctgaattat gggcaaatgt tttctcacat tcattacatt catagggttt
                                                                     1740
ctccccgtg tgaattctct gatgtatttt gagggctgaa ttatgggcaa aagttttctc
                                                                     1800
acagteacta catteatagg gttttctace tgtgtgaatt etetgatgtg eteteaggge
                                                                     1860
tgaattgtag gtgaaagate teceacatte attacattea tagggtttet cecetgtgtg
                                                                     1920
aattetttga tgtgeettga gaacagaaat atgggeaaaa gaeetteeac atteattaca
                                                                     1980
ttcataaggt ttctcccccg tgtgaattct atgatgtgct ctgagggctg aattatgggc
                                                                     2040
aaaagttttc tcacagtcac tgcattcata gggcttctca cctgtgtgaa ttctttgatg
                                                                     2100
tgctctcagg gctgagttat aggtaaaaga tttcccacag tcattacatt catagggttt
                                                                     2160
etecectgtg tgaactetet gatgtacaet gaggtgtgte ttgtgagaga aagttttete
                                                                     2220
acattcaaca cattcatagg gtttttcacc tgtgtgaatt ctctgatgtg ctctgagatg
                                                                     2280
tgatgtettg gagaaagttt teccacatte aatacattea tagggtttet cececatgag
                                                                     2340
aattetetga tgteetttga gatgtgatgt etteeeatat teaetgeeae caeagagtte
                                                                     2400
catctctgca tetgttttct ggtgtcctat gaggggtgac ttgtaagatc teccacagec
                                                                     2460
attgttatca caaggtttct cttttgtgtg aattctcaga tgtttactga ggtttgaatt
                                                                     2520
ctgacagaaa gctttcccac attcattaca ttcataaagt ttgaatccca cataagttcc
                                                                     2580
aggatgctga ataggatgtg aacttgaaca aaaggatttt gcacattcct catattggta
                                                                     2640
agttttctct cctgagtggg gcctctgatg ctgaatgagg tgtgctttcc ggtaaaagga
                                                                     2700
ttttctgcat ttcccatgtt catcagaaag gtagaattta tcttctgtgt gaattctctg
                                                                     2760
atgtgctgta aagtctaatt tctggtagag ggcatctgc
                                                                     2799
```

```
<210> 5075
<211> 2261
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(1387)
<223> similar to gi746490 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5075
ccaacttcaa gtgggagttc acattgctga cgtgagttac tttgttccgg agggatctga
                                                                       60
tetggataaa gtggetgeeg agagggetae aagegtetae ttggtteaaa aggtggteee
                                                                      120
catgettece aggetgetgt gegaggaget gtgcageete aaccecatgt cegacaaget
                                                                      180
gaccttetet gtgatetgga caetgaetee agagggeaag ateettgatg aatggtttgg
                                                                      240
ceggaceate atecgetect geaceaaact tagetaegag catgeacaga geatgattga
                                                                      300
aageccaact gagaaaatee etgegaaaga getgeeeeee attteeeeag ageatageag
                                                                      360
cgaggaggta caccaggccg tettgaatet ccacggaatt gecaagcagt tacgccagca
                                                                      420
gegetttgtg gaeggegeae ttegtttgga teagetaaag ettgetttea etetggaeea
                                                                      480
                                                                      540
cgagaccgga ttgcctcaag gatgtcatat ctatgagtac cgcgagagca acaagctcgt
ggaggagttc atgctcttgg ccaacatggc agtggcccac aagatccacc gcgccttccc
                                                                      600
cgagcaggcc ctgctgcgcc ggcacccccc gccccaaaca aggatgctca gtgacctggt
                                                                      660
ggaattetge gaccagatgg ggetgeeegt ggaetteage teegeaggag ceeteaataa
                                                                      720
                                                                      780
aagcetgace caaacatttg gagatgacaa gtactcactg geeegcaagg aggtgeteac
caacatgtgc teceggeeca tgeagatgge actgtactte tgetegggge tgetgeagga
                                                                      840
cccagegeag tteeggeact aegegeteaa tgtgeeeetg tacacacact teacetegee
                                                                      900
catcegeege tttgeegaeg teetggtgea eegeeteetg getgeegegt taggetatag
                                                                      960
ggagcgacta gacatggcgc ccgataccct gcagaaacag gcggaccact gtaacgaccg
                                                                     1020
ccgcatggcg tccaagcgcg tgcaggagct cagtaccagt ctcttctttg ctgttctggt
                                                                     1080
caaggagagt ggccccctgg agtcagaagc catggtgatg ggcatcctga agcaagcctt
                                                                     1140
cgacgtgctg gtgctgcgct acggcgtgca gaagcgcatc tactgcaacg cactggccct
                                                                     1200
geggteecae caetteeaga aggtgggeaa gaageeggaa eteaegetgg tetgggagee
                                                                     1260
tgaggacatg gagcaggagc cagcacagca ggtcatcacc atcttcagcc tggtggaggt
                                                                     1320
ggtcctgcag gcagagtcca cagccctcaa gtacagcgcc atcctgaagc ggccaggcac
                                                                     1380
ccagggccac ctgggccctg agaaggagga ggaggagtct gacggtgagc ccgaggactc
                                                                     1440
aagcaccage tgagetecae cageegeetg eccegeetge eccegeetgee tgteeegeea
                                                                     1500
cactggcttt aggacctgtt gacacggagg ggggttttta atttggtttt taacaactca
                                                                     1560
ggggtttgtt tttattttta tttaattttt gcagctcaac ttttaaacaa actgcagggg
                                                                     1620
agagggtggg gctggaagga aggctgaggc ctggtcagca gtgaccccag cagagcaggc
                                                                     1680
eccagteete etgggagget ggeeceeett tttttetggg ecctaetgee etcetetgee
                                                                     1740
caggaaatgg gggggtttca gcaactcagt gtcacagaat aaaatcaagt gtggagtgcc
                                                                     1800
atctggtgtg tagggcgcct ctgggaagcc tgggcagcag aatgcccctt gcacccaggg
                                                                     1860
caagggaccc agttcaggct tcacccctcg ctgctgagcc gatgtcaaca cctggaactt
                                                                     1920
tectgteagt tecaacacga tteagagetg getgeetgge agatgattga tactggagte
                                                                     1980
tcattctgcc tgattaaaaa tggaattagt atgcaacact gagagegeee ccatcaecet
                                                                     2040
gacgaatgtg actgtgtctg acgaatgtga ctgtgtccaa ccctgccccc acttcctctc
                                                                     2100
tgcaccaget cegeagggee tggtgggagt catgggteet gtgatacece etceceteag
                                                                     2160
ttcctcaagc agcactctgt gaggtcctgt gcccagctct ggtgtgagtg ggtgcccgg
                                                                     2220
cagcaccaag ggagcctgga cagaggagcc ggcctgggct g
                                                                     2261
```

```
<210> 5076
<211> 526
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(399)
<223> similar to gi5640015 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

#### <400> 5076 atacaaatgt gaggtgtgta caaagggttt cagtgagagt tcacqccttc aaqcacacca 60 aagggttcat gtggaaggga gaccctataa atgtgaacag tgtggtaagg gtttcagtgg 120 gtattcaagt cttcaagccc atcacagagt ccacacagga gagaaaccat acaaatgtga 180 ggtatgtgga aagggettea gteagagate aaatetteag geteaecaga gagteeacae 240 aggagagaaa ccatacaaat gtgatgcatg tggtaagggt ttccgttgga gctcaggtct 300 teteatteat caaagagtee atagtagtga taaattetat aaaagegaag aetatggtaa 360 ggactaccct tcatcagaga atctacacag aaatgaagat tctgttttgt tttgaagtcc 420 tcaaatggga gctgaaattt tccagtcact agagttcttt cagtagaaaa agaattttta 480 aaaattaaaa tgtaatgttg ctgcccaact tcaacattca taatgg 526

```
<210> 5077
<211> 1115
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1014)

<223> similar to gi5353887 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5077
atggatgaaa caggaaatct gacagtatct totgocacat gocatgacac tattgatgac
                                                                       60
ttccgcaatc aagtgtattc caccttgtac tctatgatct ctgttgtagg cttctttggc
                                                                      120
aatggctttg tgctctatgt cctcataaaa acctatcaca agaagtcagc cttccaagta
                                                                      180
tacatgatta atttagcagt agcagatcta ctttgtgtgt gcacactgcc tctccgtgtg
                                                                      240
gtctattatg ttcacaaagg catttggctc tttggtgact tcttgtgccg cctcagcacc
                                                                      300
tatgctttgt atgtcaacct ctattgtagc atcttcttta tgacagccat gagctttttc
                                                                      360
eggtgeattg caattgtttt tecagtecag aacattaatt tggttacaca gaaaaaagee
                                                                      420
aggittgigt gigiaggiat tiggattitt gigattitga ccagitcicc attictaatg
                                                                      480
gccaaaccac aaaaagatga gaaaaataat accaagtgct ttgagccccc acaagacaat
                                                                      540
caaactaaaa atcatgtttt ggtcttgcat tatgtgtcat tgtttgttgg ctttatcatc
                                                                      600
```

```
ccttttgtta ttataattgg ctgttacaca atgatcattt tgaccttact aaaaaaatca
                                                                      660
                                                                      720
atgaaaaaaa atctgtcaag tcataaaaag gctataggaa tgatcatggt cgtgaccgct
                                                                      780
gcctttttag tcagtttcat gccatatcat attcaacgta ccattcacct tcatttttta
                                                                      840
cacaatgaaa ctaaaccctg tgattctgtc cttagaatgc agaagtccgt ggtcataacc
ttgtctctgg ctgcatccaa ttgttgcttt gaccctctcc tatatttctt ttctgggggt
                                                                      900
aactttagga aaaggetgte tacatttaga aageattett tgteeagegt gaettatgta
                                                                      960
cccagaaaga aggcctcttt gccagaaaaa ggagaagaaa tatgtaaagt atagtttaaa
                                                                     1020
cccatttcca gtccaaacca atgaaaatag tttcccaaat aagtattttg tcaaatcatt
                                                                     1080
tacaaaaaaa ataaaaattt tacttaaaaa aaaaa
                                                                     1115
```

```
<210> 5078
<211> 1669
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1665)...(1274)
<223> similar to gi4973108 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5078
ttttttttt ttagcttaca aacaacagaa ttttatttct catagttctg gaggcctgga
                                                                       60
agttcaagat caaggcaacg acagagtcgg tgtttggccg acagctggtt tttttggttct
                                                                      120
catacatgtc atcttcttgc cacgtcctca tatggtggaa gggtcgagtt agctctctgg
                                                                      180
ggccttttta aataagggca ctaatcctaa tcatgagggc tctgcactcc tgatctaatc
                                                                      240
acttcccaaa ggcccacttc ttaaatgcca tcaccttggg gattaggatt tcaacataat
                                                                      300
ggettttgag gggatacaaa etagaactaa agaacagace ataggcacca getaaagact
                                                                      360
ggtatgtcag taagaatagc tgaatgaggc tggaaagaga taataattag aagggacaaa
                                                                      420
gtcccattcc agagcccaac acctagggtt tcattaggct ggggtttctc aaactcagta
                                                                      480
caactgacat tttgggccag attatttttc gttgtggggt actgccctgt gcattatagg
                                                                      540
atgittagcg gcacccctgg cttctattta ctggatgcca gtagcacaca catcccacca
                                                                      600
teccecaace ecceaagtat aatgaceaaa atgtetecaa acattgeeca atgteetetg
                                                                      660
gggggcaaaa ttgcccccag ttgagactgc tgtattcaat ccacttccat tagttctctt
                                                                      720
taaatcacaa cattetggte gatataacag atagaaatte etgatetaga cagcagaatt
                                                                      780
ctgttgtgtt aagagagaat acacaattat agctaaactc ttattctcac tttatataaa
                                                                      840
tttatttaca ctcacctaac tacattattc taacaaaaca ctgggacaac ttgtaaaagt
                                                                      900
acttatgcat atgtgcágga caggaagaga aaataaagga accagattta ttggggtggt
                                                                      960
ttaagtgaga tcatgggatg aactcgttta cttctattca gcagtagcct ttgtggtccc
                                                                     1020
aggetteegg tggecagata atteceteaa etecatgage aggtgaeega ggaggaetet
                                                                     1080
cacateetge atgtgtttga gaagaaggee catetggtga tacagatgag gatetggeat
                                                                     1140
ccccagagga gaagaaaagc ctggatcctc agaagatggg gttggcggcg gaggcagagg
                                                                     1200
cccaggggcc tectcaggag cagttectgg agcagetgat ttetgaggag etggatteaa
                                                                     1260
tgtgggaggt gcagcagagc tggaagcacc ctgcactctg atctctagct gggggctctg
                                                                     1320
tttccaaact tggttgtcct cagtggctgc ctcacaccag tatgacccgg agtgatcttc
                                                                     1380
tgaagetgtg gggatetgga attetgagga gageceetg etttgeacta teetteeate
                                                                     1440
cttgtagaag gagaagagga ggcgggcagc tgacctctgc aggggcaact ttgtctgaca
                                                                     1500
actcagggtc atggggcttc ctgcttgggg ttcagctgag ggtacagctc tgagaattgg
                                                                     1560
cgctggaaac agttcttgga ctgtgatagc cacaacagat gctgtttctg ggatcccagg
                                                                     1620
accagggete tggaagatge cactgeagtg gtagtgeeeg etgtetgee
                                                                     1669
```

```
<210> 5079
<211> 913
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(236)
<223> similar to gill76422 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5079 ttcactgcag aagaagggga cttgtggttt accttgagag ggaacgcccc cgttcaggtt 60 cacttoctgg atcettactg ctetgecteg gtggcaggag ceegggaagg agattatatt 120 gtetecatte agettgtgga ttgtaagtgg etgaegetga gtgaggttat gaagetgetg 180 aagagetttg gegaggaega gategagatg aaagtegtga geeteetgga etecacatea 240 tecatgeata ataagagtge cacatactee gtgggaatge agaaaaegta etecatgate 300 tgcttagcca ttgatgatga cgacaaaact gataaaacca agaaaatctc caagaagctt 360 teetteetga gttggggcae caacaagaae agacagaagt cagecageae ettgtgeete 420 ccatcggtcg gggctgcacg gcctcaggtc aagaagaagc tgccctcccc tttcagcctt 480 ctcaactcag acagttettg gtactaatgt gaggaaacaa acatgttcag gccccgaaca 540 tttccggtgc tgactcggcc ttaaacgttt gtgccataat ggaaaatatc tatctatctg 600 ttctcaaatc ctgtttttct catagtgtaa actcacattt gatgtgtttt tatgaaggaa 660 agtaaccaag aaacctctag gaattagtga aaaaagaact tttttgaggt gtgttactat 720 actgctgtaa gttatttatt atataaagta ttgtaaatag aatagcgttg aagatatgaa' 780 atatggctat ttttaatggt gacaattatg acttttagtc actattaaat tggggttacc 840 tatatcagta caatttgtag ttgtttccag gtttggctaa taatcattcc ttaacctaga 900 attcagatga tcg 913

```
<210> 5080
<211> 686
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (193)...(372)
<223> similar to gi2865208 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5080
ctgggccgca gggcagtgca ctcctcagcc ggcttcctct ggtcacgccg gcggggccgc 60

```
120
agcactgtgt gaggggtggg gccctggcac ctagcttggg cacgtgccct cctagccgga
cctcccacag gcaggggctc tgctcccacc tgcctctgcc agcccactag tgctcaccgt
                                                                      180
tccctaggtg tgtttgtcaa agtgtctctg atgaaccaca acaagtttgt caagtgcaag
                                                                      240
                                                                      300
aagacttcag ctgtgctggg ctccatcaac cctgtgtaca atgagacctt cagcttcaag
                                                                      360
qeeqatgeca eegagetgga taeegetage etcageetga etgtggtgea gaacatggaa
ggggacagta aggccacacc ctaccctggg ctgctgggat ggggaccacg aggggctgcc
                                                                      420
                                                                      480
qaqtqttcaq gcagagtgag tgcctcctgt cctgacctca aaaggagctg tacgagctcc
                                                                      540
ctccctggtt aaggaaacta gtgctcagaa aggctgaaat attgcccaag gcctgggttt
caggedcage tttagtecag ttgagetetg tetgtggcae cetagaaaca ggttaagcag
                                                                      600
                                                                      660
ccqqqcatgc tggctcacat ctgtaatccc agcaccttgg gaggccaagg tgggtggatc
                                                                      686
acttgagete aagagtteaa gaccag
```

```
<210> 5081
<211> 1642
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(524)
<223> similar to gi4038081 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5081
                                                                       60
atgagacgct ttttaagcaa agtctacagt ttcccaatga gaaaattaat cctctttctt
gtetttecag ttgtgagaca aacteecaca cagcacttta aaaateagtt cecagetetg
                                                                      120
cactgggaac atgaactagg cctggccttc accaagaacc gaatgaacta taccaacaaa
                                                                      180
ttcctgctga tcccagagtc gggagactac ttcatttact cccaggtcac attccgtggg
                                                                      240
                                                                      300 .
atgacetetg agtgeagtga aateagaeaa geaggeegae caaacaagee agaeteeate
actgtggtca tcaccaaggt aacagacagc taccctgagc caacccagct cctcatgggg
                                                                      360
accaagtetg tgtgcgaagt aggtagcaac tggttccagc ccatctacct cggagccatg
                                                                      420
                                                                      480
tteteettge aagaagggga caagetaatg gtgaaegtea gtgacatete tttggtggat
tacacaaaag aagataaaac cttctttgga gccttcttac tataggagga gagcaaatat
                                                                      540
                                                                      600
cattatatga aagtcctctg ccaccgagtt cctaattttc tttgttcaaa tgtaattata
                                                                      660
accaggggtt ttcttggggc cgggagtagg gggcattcca cagggacaac ggtttagcta
tgaaatttgg ggccaaaatt tcacacttca tgtgccttac tgatgagagt actaactgga
                                                                      720
aaaaggctga agagagcaaa tatattatta agatgggttg gaggattggc gagtttctaa
                                                                      780
                                                                      840
atattaagac actgatcact aaatgaatgg atgatctact cgggtcagga ttgaaagaga
                                                                      900
aatatttcaa cacctcctgc tatacaatgg tcaccagtgg tccagttatt gttcaatttg
                                                                      960
atcataaatt tgcttcaatt caggagcttt gaaggaagtc caaggaaagc tctagaaaac
                                                                     1020
agtataaact ttcagaggca aaatcettca ccaattitte cacatactit catgeettge
                                                                     1080
ctaaaaaaaa tgaaaagaga gttggtatgt ctcatgaatg ttcacacaga aggagttggt
                                                                     1140
tttcatgtca tctacagcat atgagaaaag ctacctttct tttgattatg tacacagata
tctaaataag gaagtatgag tttcacatgt atatcaaaaa tacaacagtt gcttgtattc
                                                                     1200
                                                                     1260
agtagagttt tettgeeeae etattttgtg etgggtteta eettaaeeea gaagaeaeta
                                                                     1320
tgaaaaacaa gacagactcc actcaaaatt tatatgaaca ccactagata cttcctgatc
                                                                     1380
aaacatcagt caacatactc taaagaataa ctccaagtct tggccaggcg cagtggctca
cacctgtaat cccaacactt tgggaggcca aggtgggtgg atcatctaag gccgggagtt
                                                                     1440
caagaccage etgaccaacg tggagaaace ccatetetae taaaaataca aaattageeg
                                                                     1500
ggcgtggtag cgcatggctg taatcctggc tactcaggag gccgaggcag aagaattgct
                                                                     1560
```

```
<210> 5082
<211> 1137
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(269)
<223> similar to gi2598168 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

#### <400> 5082 tggagagaaa ccatttaaat gtgaggaatg tgggaaagaa ttcagttgga gtgctggtct 60 cagtgcccat cagagggtcc acacaggaga gaaaccctat acgtgtcagc agtgtgggaa 120 gggcttcagt caggcctcac attttcacac acaccagaga gtccacactg gagagaggcc 180 ttacatatgt gatgtetgtt gtaagggett cagteagagg teacatetea tetaceatea 240 gagagtecae actggaggga atetgtagaa atgagaggtg tggtteagee tteagttaga 300 gctcacatct ttgtctccgt tgggaagtcc atgctgatga ttgtgaaaag ttcctttaaa 360 actagaaget teaaagaate ttgacaggaa agaagtetet caaatgetgt gttttagaet 420 tggttaggac atgaattett tacaaacgte atattteaca gatgegagaa aactttgtte 480 tgtaaatatg atcagtgttt atatcagagt accaggtgtc ccggttctca agatgtaaca 540 cagcagaaaa gtcttgtcgg agtctgcaca ggagagaggc cttcctttaa caaaagtatg 600 attgacagaa aaaatggatg tcaactaaaa tgtaacctct atgtaaggag gtgtttttca 660 ccactctate tetaccatgt agaattgtge ttggeteata atagggeeca geaattactg 720 aagaaagtga agaaaatacc tataattagg acaaatactt gaaaattcta gtctgttttc 780 tactetaaat ttatattaat ttatatteaa aaggaateet geaagtagee ttaatgaegt 840 tagtttcagt aagtactgaa aagtatataa tactgccatc catactaaca caaatttgga 900 aaaaagacat gaatggctcc catcettcag cettagttet ttgtacagtg tatcatcagt 960 tgtgtacagt atgattttta gtgtcagttt atagactgaa caatactgtt tttatctaat 1020 gtgaccctgc aatttacatg attagaattt ttggccccta agctgtactg taactctgaa 1080 agtgttaaaa gtagttactg atgacaaaaa gtttcttagt aaacttgaat tgttaaa 1137

```
<210> 5083

<211> 1839

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1840)

<223> n = a,t,c or g
```

```
<221> misc_feature
<222> (295)...(640)
<223> similar to gi4455730 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5083
gagattgcaa acctcatctt ggctgagaac tgcgaggctg ccctggctct tcatctctat
                                                                       60
aggggaggca ggcttttgca aggccaccga atcccttttg gagtcatctt tggtggaact
                                                                      120
gatgtaaatg aagatgccaa ccaggcggaa aaaaacacag tcatgggcag agttcttgag
                                                                      180
gaagecagat ttgctgtcgc tttcacagag tcaatgaagg aaatggcaca agcgcagtgg
                                                                      240
gtcgatccag tgtttacaag ggaagtgaaa gccaaagtga aaagagccgc tggggtacga
                                                                      300
ttgattggag agatgcctca agaagatctg cacgcggtgg tgaagaattg cttcgcggtg
                                                                      360
gtgaataget etgtetetga aggeatgtea getgeaattt tggaggeaat ggatttagaa
                                                                      420
gtaccggtat tggccaggaa catccccggg aatgctgccg tggtgaagca tgaagtcaca
                                                                      480
gggctactgt tttccaatcc tcaggagttt gttcatctgg caaagagact ggttagtgat
                                                                      540
cctgcattag aaaaggaaat cgtagtgaac ggaagggaat acgtgagaat gtatcattca
                                                                      600
tggcaggtgg aaagagacac ctaccaacag ctcatcagga agctggaagg aagcactgaa
                                                                      660
gattgaggge ecegeeteat cagacacetg etetetgaca cacagetetg ggtgeacaet
                                                                      720
cagagacaga gttctggatc acgtgggccc agtgcagttc aaataaaacc agcctcagcg
                                                                      780
gaatcctaga aaatgttagt cgtgagtccc cagagccact gcattcatcc catatccttc
                                                                      840
tgtgcgttca gatgctgtcc caggcgtgtt caccagccag tcctgatgga ggtgcatgag
                                                                      900
tgactgggtt gactgggaca gggaaagggg aactggtttt cagggaattt gggagagaat
                                                                      960
ttgattacct gccttagggc tttggtgtgg acaatagagg cttattttca agcagtcatg
                                                                     1020
gttcagacte etecegeetg cettetgace aaceteteee categttgee agtttgaaag
                                                                     1080
gcaaaagcaa aacagacgtg tcagctgagc cgagtcctcg caggattttt gttqtqatct
                                                                     1140
caggactetg acaggoacgt gggtgacccg aggettetet gaacactaga aagegetgtg
                                                                     1200
agtgagetea egeceggeae ageteaettt teaatggtgg aattgaaagt tgtgettttt
                                                                     1260
agaaaagtgg ccaggctgcc cgcaggcccc gcccacctct tggctgaatt tgagtggaaa
                                                                     1320
accaggaagg aacaagcgcc acgtcacgca tagcctgcaa atcgcccgcg tgaccctgag
                                                                     1380
atggaggeet gaggetttgg gtecagggtg ggetetteee etteceaeat cagggaceeg
                                                                     1440
gggatggatg teggaagggt caccageete cageetttgg caggatggag ettgggtetg
                                                                     1500
cagggetttg cagecacaca gegaggteag teeggggeea geegegeeat catggtaatg
                                                                     1560
gtggcctcgc cccatccatg tcatccatgt cacatgagga cgtgcagtct ttccttgttc
                                                                     1620
cttttcctta gtgggaattt tgcctgggga gaacctccac ttgaataatt gaaatttttt
                                                                     1680
tgcattgcct gttgggattt cctttacgga caatgggggg aacgcggtgt ttcccacctc
                                                                     1740
ttgtgggtag aaagcagtot gotttgagga ggcgagaagg caaagcangg ggcaggggct
                                                                     1800
ttgctgtggg aagcgttcgg tgaaagcggg tttcgacgc
                                                                     1839
```

```
<210> 5084
<211> 459
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (85)...(406)
<223> similar to gi3327076 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5084
gggttcaaga cccacttctt ggtctgtggg cctggggagg ggtgctggtc aaggagcatg
                                                                       60
ggtggtgaca gaggtgtctg ggggcagtgt gagatgaatc agatgagcgg agaacctctg
                                                                      120
gacaagetga acttegagge cateaactte tgteggggte tgggcageca ggcatecace
                                                                      180
gtgactgaga ttgtgaagca gcaagacccc ctggtctaca aggccatcca gcaaggcatc
                                                                      240
aatgctgtga accaggaagc catgaacaat gcacagagga ttgaaaagtg ggtcatcttg
                                                                      300
gagaaggact tttccatcta tggtggagag ctaggtccaa tgatgaaact taagagacat
                                                                      360
tttgtagccc agaaatacaa aaaacaaatt gatcacatgt accactgact gctttgatgg
                                                                      420
agctgctctc agctgttctg atgccttcag caggaagac
                                                                      459
```

```
<210> 5085
<211> 774
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (633)...(516)
<223> similar to gi5689451 in the genepept database release 114,
    Run with FASTXY 3.3,t00, default parameters
```

```
<400> 5085
cactataatg attggtatta aagctgtttt tttttctttt tttaaaaaata catgtcaaaa
                                                                       60
ttttcttgga ctcccctggc aagcaggtat acttcaagag cacgggagct tttctttcaa
                                                                      120
gagtecacat ttecaggaag getggtgaga geaaacgagg gaettteagt aacetggeaa
                                                                      180
ggcagaataa agtgaccaag ctggaacgaa tccccctgtg ccctggcttc atcgggacta
                                                                      240
cetgeagget gateaggggt ggeeageeae aaacaceteg agggeettee attteaette
                                                                      300
acactggcag gcacttacte agecetgtta aacacaeggt tagtgecata tgettgaget
                                                                      360
gagatcacta ggaggggcag cgctgggtaa ctctttggga cttcacattt ccagagggag
                                                                      420
gcatcttgtt tttcccctca gctgtggaaa ttctttttgg aaagcttaag agcaaggctg
                                                                      480
ecettigeae acaaggacat getgacegtt atacetgetg tagatgeetg tetecqttet
                                                                      540
cattggcagg actactctcc gacccattac tgcttcctga ttgctctttt tcattcaaca
                                                                      600
aagctgtggc atacgctaac gtgtcctgca gaagattcaa acacaagacg acaaagttag
                                                                      660
ggcccattca gtggcagcag caaccgccag ggaagactac ctttcatctg accttcagtg
                                                                      720
ggaccggagg cctgagagtg aggccttcat cacagtcacc agaaccccct caac
                                                                      774
```

```
<210> 5086
<211> 1806
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (211)...(826)
```

# <223> similar to gi5817018 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5086
aagacatcag aatttgtatg tgatccatac aatattattt tttagtatgc ttttagcaaa
                                                                       60
caaactcact ggtctttctt tactattaat aatgtgctaa ttttgtattt gagtttctga
                                                                      120
tcaaactttt tattcctttg tcatcttttc ctactttaat ggatcgagaa gtggcgttgc
                                                                      180
ttgctgaaat ggacaaagtg aaagctgaag caacactttg ttagtgaacg taaatatgat
                                                                      240
gaggatetgg gacgagtage eegqttcace tqtqatqtaq aqaceetaaa qaaqaqeatt
                                                                      300
gatteatttg gacaagtgte teatecaaag aacagetatt egaceagate eegatgtage
                                                                      360
tcagttacat ctgtgtcctt gagtagccca agtgatgcct ctgctgcttc ctcttccacc
                                                                      420
tgtgcctctc ctcccagcct tacaagtgct aacaagaaaa actttqcacc qqqaqaqact
                                                                      480
cctgcagcca tagcaaactc cagtggccag ccctaccagc cacttcggga ggtattgcca
                                                                      540
gggaacagac gaggaggaca gggctatagg ccacaaggcc aaaagtccaa tgaccccatq
                                                                      600
aaccaagggc ggcatgacag tatgggtcgt tacagaaaca gctcgtggta ttcatctqqt
                                                                      660
tocaggiate agagigetee ateteaggea ecaggaaaca ceatigaaag aggeeagaet
                                                                      720
cactotgoag ggaccaatgg aactggagto agoatggago coagcotto cacgoottoa
                                                                      780
ttcaaaaagg ggctccccca gcgcaaaccc aggacctctc agactgaagc cgtgaactct
                                                                      840
tgagagaaaa tccagttggc ctctctcctc tatccacaca attcaacttg ataactggac
                                                                      900
tttaggaaac ttacagttag atgtaataac aaaaagaagt ttatgcgtat cactttttqt
                                                                      960
gccattctaa gtatttttgg tttcttgtct ccttatttcc tctttaccat ttttqqaqqq
                                                                     1020
gaagctattt tttttccttg atctttccca gtgatatgga ttgaatctgg ttggtcattt
                                                                     1080
ccaccaggaa tcagaggcag ctgttaccag gtttcggcct tccagttgat ccctccactg
                                                                     1140
tecaggetgt etcaggagga ggtgaatcag agetagtetg teacetttee aatetaagee
                                                                     1200
gaagccacag gtgcctgaca ggttcccttc taacaactat ttgaccaaga gaggcaatca
                                                                     1260
gggggttgta tactgcactg gattcgccag agaagggaaa atttaattag tgaaaaggaa
                                                                     1320
agaacactag gaaacatttg agaacctgcc totatcccag aatgtgctqq agatttgaca
                                                                     1380
ctcaaatcag tgtttagtct tctgcttggc accatagctt aacctqcaqt ttcttcaaaa
                                                                     1440
tgcccaatgc cttgtttcct attaccttag attgcaaacc agtctaggga agtctatgag
                                                                     1500
aaagtagcat ttaattaaag tttaaaaaaa aaaaggttgg gcgttgtggc tcatgcctgt
                                                                     1560
aatcccagca ctttgggagg ctgaggcggg tggatcacta ggtcaggagt tcaagaccag
                                                                     1620
cctggccaac atggtgaaac cctgtctgta ctaaaaatac aaaaattagc tgagcatggt
                                                                     1680
ggcgtgtgcc tgtaatctca gctactcagg aggctgaggc aggagaatcg cttgaaccca
                                                                     1740
ggaggcggag gctgcagtga gctgagattg tgccactgca ctccagcctg ggagacagag
                                                                     1800.
caagac
                                                                     1806
```

```
<210> 5087
<211> 1784
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (38)...(1483)
<223> similar to gi4768838 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5087
ccagctgcca ggcaccttgt aaatacatgg tgccgggcag ctggccatga ctcatccaag
                                                                     60
tcatcattta aattttggaa tgaatcctga tcatgccagg aattcattat ctaactgtgg
                                                                    120
aattcggcag cccaaatacg gagacagaaa agttcatcac atgcacatgc ggaagaaagg
                                                                    180
gattaacacc ttgataaata tcatgtcacg ccttggccaa gatgacccaa ctccctcgag
                                                                    240
gattaaccac aatgaacggt tggaattcct gggtgatgct gttgttgaat ttctgaccag
                                                                    300
cgtccatttg tactatttgt ttcctagtct ggaagaagga ggattagcaa cctatcggac
                                                                    360
tgccattgtt cagaatcagc accttgccat gctagcaaag aaacttgaac tggatcgatt
                                                                    420
tatgctgtat gctcacgggc ctgacetttg tagagaatcg gacettcgac atgcaatggc
                                                                    480
caattgtttt gaagcgttaa taggagctgt ttacttggag ggaagcctgg aggaagccaa
                                                                    540
gcagttattt ggacgettge tetttaatga teeggaeetg egegaagtet ggeteaatta
                                                                    600
tectetecae ceactecaae tacaagagee aaataetgat egacaaetta ttgaaaette
                                                                    660
teeggtteta caaaaactta etgagtttga agaagcaatt ggagtaattt ttactcatgt
                                                                    720
togacttotg gcaagggcat toacattgag aactgtggga tttaaccatc tgaccotagg
                                                                    780
ccacaatcag agaatggaat tcctaggtga ctccataatg caactggtag ccacagagta
                                                                    840
cttattcatt catttcccag atcatcatga aggacactta actttgttgc gaagctcttt
                                                                    900
ggtgaataat agaactcagg ccaaggtagc ggaggagctg ggcatgcagg agtacgccat
                                                                    960
aaccaacgac aagaccaaga ggcctgtggc gcttcgcacc aagaccttgg cggacctttt
                                                                   1020
ggaatcattt attgcagcgc tgtacattga taaggatttg gaatatgttc atactttcat
                                                                   1080
gaatgtctgc ttctttccac gattgaaaga gttcattttg aatcaggatt ggaatgaccc
                                                                   1140
caaatcccag cttcagcagt gttgcttgac acttaggaca gaaggaaaag agccagacat
                                                                   1200
teetetgtae aagaetetge agaeagtggg eecateeeat geeegaaeet acaetgtgge
                                                                   1260
tgtttatttc aagggagaaa gaataggctg tgggaaagga ccaagtattc agcaagcgga
                                                                   1320
aatgggagca gcaatggatg cgcttgaaaa atataatttt ccccagatgg cccatcagaa
                                                                   1380
gcggttcatc gaacggaagt acagacaaga gttaaaagaa atgaggtggg aaagagagca
                                                                   1440
tcaagagaga gagccagatg agactgaaga catcaagaaa taaaggaggg catgcaagtg
                                                                   1500
tggagtattt acttgctcag taactgtgac tgttgtctat tgagacctag cctagttttc
                                                                   1560
1620
tgttttaatg atctgttttt agctggatgg tctttattac aaagtattag atttttcttc
                                                                   1680
tatttaacgg aaaacttgac tttggtgaat gtgcattact tccttttatt ttgctcttta
                                                                   1740
aataataaaa ttcaagaagc atattctatg tggaaaaaaa aaaa
                                                                   1784
```

```
<210> 5088
<211> 843
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(844)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (795)...(174)
<223> similar to gi3335567 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5088 ttttttttt ttttgtaggt cagagacagc tggatcagct ccagcccaca tttattacaa

```
aatagtgacc gcagttctgg tatagaaaag atccctgaca gcccagtaca cctgcaacgg
                                                                      120
ccccacccc acagagttcc tctctcaggt gcctcaggtg tggaagttct cagattcgaa
                                                                      180
                                                                      240
qqtttcctqc caggagggcg ctgtaccggg cagttgtgag gggcaggtag gcacctacag
                                                                      300
cctggtccag aacgtacagt gggtcagaca gggtgctggg gtcgaagccc tcatttgcca
                                                                      360
tecgaaettt etgetgtttg aaggtetetg tggtggeeaa agaeteetgg ageetgagga
                                                                      420
ateggggeeg ggeataaggt ggeaagttet cagacaegtg ggtgtagage tgeataaggt
ccaaagcgtg ggggggacgc agaactaggg ctgccattcc agccctgcct tcatgccctg
                                                                      480
gcacagtgac tocatagacg ttcacctcct gaagaaaatc tagggcctcg aagacctctg
                                                                      540
ccaccteggt tgtggccaca ttctccccct tccacctgaa ggtgtctcca gtacgatcat
                                                                      600
                                                                      660
ggaagcggag aaaaccttgg tcatcgcaga ccagcaggtc cccagtgttg aagaaaacat
ccccaggccg gaagacatcc. tttagcaact tcccctgggc cagctctggc ccgccagcat
                                                                      720
                                                                      780
ageceaggaa tggggaetge tggettaeeg gggeeaceag cagecetgge teacetggea
                                                                      840
gagtetecag ggteaggagt ggtgtgeeta ggggetacaa ceagtgtete aaantngeee
                                                                      843
act
```

```
<210> 5089
<211> 851
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (92)...(652)
<223> similar to gi2673914 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5089
gtgactgttt ctttttttgc catcacaaaa taatatttta gtcaaatttt taaaatctta
                                                                       60
ttcagaggac tttacctcat tttttccttt tttcagaact gtgacaattg agaagtgcag
                                                                      120
gaatagcate tttgtettgg geeetgtagg gaetaeaett eaceteeaea gttgtgaeaa
                                                                      180
tgttaaagtc attgctgttt gccatcgttt gtccatctct tctacaacag gttgcatctt
                                                                      240
tracettett acecctadas eccacttat tetetetege aaccagacae taactttte
                                                                      300
cccttttcat acacattacc caatgctaga ggaccatatg gccaggactg gccttgctac
                                                                      360
agtgcctaac tattgggata atccaatggt tgtgtgcaga gagaacagcg acacaagagt
                                                                      420
cttccagctt ttaccacctt gtgaattcta tgtatttatt attccctttg aaatggaagg
                                                                      480
ggacacaaca gagatacccg ggggtcttcc atctgtatat cagaaagcac tgggtcaaag
                                                                      540
agaacagaag atacagatct ggcagaaaac tgtgaaggag gctcatttga caaaggatca
                                                                      600
aaggaagcag ttccaggtac tggtagagaa caagttttat gaatggttga ttaatacagg
                                                                      660
acatogocaa cagotggaca goottgtaco cootgoagoa ggotocaaac aagoagotgg
                                                                      720
ataaggatet tacatgeaga caetgggeee tggaaataca aggataaatg gaggatggtg
                                                                      780
ctcatcttga aacttgaaac taaattggga aggtgctatt gctgcttaag agacattggg
                                                                      840
acttttctgt c
                                                                      851
```

```
<210> 5090
<211> 662
<212> DNA
```

```
<221> misc feature
     <222> (74)...(604)
     <223> similar to gi3287449 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5090
gaagatacaa gtcacggttg atgatectgt cacaaagcca gtggtgcaga ttcatectec
                                                                       60
ctctggggct gtggagtatg tggggaacat gaccetgaca tgccatgtgg aagggggcac
                                                                      120
teggetaget' taccaatgge taaaaaatgg gagacetgte cacaceaget ceacetacte
                                                                      180
cttttctccc caaaacaata cccttcatat tgctccagta accaaggaag acattgggaa
                                                                      240
ttacagetge etggtgagga accetgteag tgaaatggaa agtgatatea ttatgeecat
                                                                      300
catatattat ggaccttatg gacttcaagt gaattctgat aaagggctaa aagtagggga
                                                                      360
agtgtttact gttgaccttg gagaggccat cctatttgat tgttctgctg attctcatcc
                                                                      420
ccccaacacc tactcctgga ttaggaggac tgacaatact acatatatca ttaagcatgg
                                                                      480
gcctcgctta gaagttgcat ctgagaaagt agcccagaag acaatggact atgtgtgctg
                                                                      540
tgcttacaac aacataaccg gcaggcaaga tgaaactcat ttcacagtta tcatcacttc
                                                                      600
cgtaggtatg tgtgacatac aaggaaggga tcctaataaa acatgaatgc atgcaaaaaa
                                                                      660
                                                                      662
     <210> 5091
     <211> 1127
     <212> DNA
     <213> Homo sapiens
     <220> .
     <221> misc feature
     <222> (137) ... (505)
     <223> similar to gi4972120 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5091
ggcgtagcct aagcgtggga ttccgcgcgt gcgctcggct ccgcctggtg cggccgcggc
                                                                      60
cgggagggac tggattatgt cggccccgtt tgaggagcgg agtggggtgg taccgtgcgg
                                                                      120
gaccccgtgg ggccagtggt accagacctt ggaggaggtg ttcattgaag ttcaggtgcc
                                                                      180
gccaggcacg cgcgcccagg atatccagtg cggcctccag agccggcatg tggcgctgtc
                                                                      240
ggtgggcggc cgcgagatcc tcaagggcaa actctttgat tctacaatag ctgatgaggg
                                                                      300
aacatggact ttggaggaca gaaaaatggt tcgtattgtt cttacaaaga caaagagaga
                                                                      360
tgcagcaaat tgttggactt ctctactaga atctgaatat gcagcggatc cttgggtgca
                                                                      420
agaccaaatg cagagaaagc ttacattaga gagattccaa aaagaaaatc ctggttttga
                                                                      480
cttcagtgga gcagaaatct caggaaacta cactaaaggt ggaccagatt tctcaaacct
                                                                      540
```

<213> Homo sapiens

<220>

600

660

720

780

tgagaaataa ctgctttttt tcctgcattc tgtggatcct agcagatatt gccaacttaa

tcagataaac agattatgta atggaagaaa aatgcggatg cctacagtta acagattgca

aaatgtatct taaaatggtt ctaaaaattg cattcaaaca taatttacat aggaaatgta

ctgtgggaac tattctatgg atatatggta aagttgtttt ggacttgttt ttgctcagca

```
tgaagtttta tatgctgcat tttactaatt ccatatttaa ccatatttt aatacaaaag 840 aacattagag tatagatcat gtgaaatgaa gggtgccttt ggggaaaatt aacttttct 900 tttgataagt atgatattca ataaaatttt ctaaatagga attgtgtacc cctttgtcta 960 agtataacaa ttcacacaaa attatagtgc tgaaaacaat tttaataaag gaaaaagtta 1020 attttcccca aaggcaccct tcatttcaca tgatctatac tctaatgtc ttttgtatta 1080 aaaatatggt taaatatgga attagtaaaa tgcagcgtcg acgcggg
```

```
<210> 5092
<211> 1978
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (80)...(669)
<223> similar to gi3878112 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5092 aggogtgaat tootactoat gtootgoact gaaatotagg atoggaaaga atoogttttt 60 atttgaaaat teetttteag aaaateagge atttgettet ettaagaegg ttttagagte 120 tttgccagaa gacgtacggt ttaacattga aataaaatgg atctgccagc ccagggatgg 180 aatgtgggat ggtaacttat caacatattt tgacatgaat ctgtttttgg atataatttt 240 aaaaactgtt ttagaaaatt ctgggaagag gagaatagtg ttttcttcat ttgatgcaga 300 tatttgcaca atggttcggc aaaagcagaa caaatatccg atactatttt taactcaagg 360 aaaatctgag atttatcctg aactcatgga cctcagatct cggacaaccc ccattgcaat 420 gagetttgea cagtttgaaa atetaetggg gataaatgta cataetgaag aettgeteag 480 aaacccatcc tatattcaag aggcaaaagc taagggacta gtcatattct gctggggtga 540 tgataccaat gatcctgaaa acagaaggaa attgaaggaa cttggagtta atggtctaat 600 ttatgatagg atatatgatt ggatgcctga acaaccaaat atattccaag tggagcaatt 660 ggaacgcctg aagcaggaat tgccagagct taagagctgt ttgtgtccca ctgttagccg 720 ctttgttccc tcatctttgt gtggggagtc tgatatccat gtggatgcca acggcattqa 780 taacgtggag aatgcttagt ttttattgca cagaggtcat tttggggggcg tqcaccqctq 840 ttctgggtat tcatttttca tcactgagca ttgttgatct atgccttttg ggcttctcag 900 ttcaatgaag caataatgaa gtatttaact ctttcactac agttcttgca agtatgctat 960 ttaaattact tggccaggta taattgccag tcagtctctt tatagtgaga aaatttattg 1020 gttagtaata taaatatttt aaactaaata tataaatcta taatgttaaa catatgttca 1080 ttaaaagcat agcactttga aattaactat ataaatagct catatttaca cttacagctt 1140 ttcatttgat caggtctgaa atctttagca cttaaggaaa atgactatgc ataattatac 1200 ctgaccatga aaaaaataag tacctcaaat gcatgcattt gcactggtga ttccaactgc 1260 acaaatettt gtgecatett gtatataggt attttttaca tgggttgaca tgcacacaac 1320 accattttca ttcagtatga accttgaggc tgctgccatt tttccactta accaaaccag 1380 cctgaaggtg aacctcgaaa cttgtttcat aaatctttca aaagttgttt tacatcaatg 1440 ttaaaatttc aaaatgctgc agggtaattt aatgtataaa atattagtaa gaaaaagtat 1500 gtattgcata cttagtagaa tagatcacaa catacaaatt caattcagtg catgctttag 1560 gtgttaagca tgagattgta catgtttact gttaggtcct tgcatctgtg gtgctaggtg 1620 agtatgagaa gatgtcaagg actggacgta ttttgttgcc taaaaaaaaa aaggctgttt 1680 gtaggcgttt taaatatgct tattttgtgt gtctctcact acctattaca cactgttgct 1740 ttgtgggttt gttttgtatg tgcgtgtgtt atacagtagt taaatttcca tgcagaaaaa 1800 taaatgtcct gaattctcat attagtattc tttattgtat atcatgcatg taatttattt 1860

```
<210> 5093
<211> 1594
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1048)
<223> similar to gi5101768 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

(400)	5075					*
atgaccacag	gcaccgagat	cacagtcatg	ggcgaggtga	gaggcatcgg	tccctggatc	60
ggcgggagcg	aggccgcagt	cccgacagga	gaagacaaga	cagccggtac	agatctgatt	120
atgaccgagg	gagaacacca	tctcgccacc	gcagctacga	acggagcaga	gagcgagaac	180
gggagagaca	caggcatcga	gacaaccgaa	gatcaccatc	tctggaaagg	tcctacaaaa	240
aagagtataa	gagatctgga	agtcgctccc	caagtaggga-	gaagaagaga	gctcgttggg	300
aggaagaaaa	agaccgttgg	agtgacaacc	agagttctgg	caaagacaag	aactatacct	360
caatcaagga	aaaagagccc	gaggagacca	tgcctgacaa	gaatgaggag	gaagaagaag	420
aacttcttaa	gcctgtgtgg	gttcgatgca	ctcattcaga	aaactactac	tccagtgacc	480
ccatggatca	ggtgggagat	tctacagtgg	ttggaacgag	taggcttcgt	gacttatatg	540
acaaatttga	ggaggagttg	gggagcaggc	aagaaaaggc	caaagctgct	cggcctccgt	600
gggaacctcc	aaagacgaag	ćtcgatgaag	atttagagag	ttccagtgaa	tccgagtgtg	660
agtctgatga	ggacagcacc	tgttctagca	gctcagactc	tgaagttttt	gacgttattg	720
cagaaatcaa	acgcaaaaag	gcccaccctg	accgacttca	tgatgaactt	tggtacaacg	780
atccaggcca	gatgaatgat	ggaccactct	gcaaatgcag	cgcaaaggca	agacgcacag	840
gaattaggca	cagcatttat	cctggagaag	aggccatcaa	gccctgtcgt	cctatgacca	900
acaatgctgg	cagacttttc	cactaccgga	tcacagtctc	cccgcctacg	aactttttaa	960
			atcacgagta			1020
tgtttgcaca	tgccccctg	accaatattc	cactgtgtaa	agtaattaga	ttcaacatag	1080
			tgccggagaa			1140
aactctttc	actgttccta	ttcagagata	ttttggaatt	atatgactgg	aatcttaaag	1200
			gcccaagatt			1260
taagatttct	tccagatgga	ggaaaggaag	tgctgtccat	gcaccagatt	ctcctgtact	1320
			aggaggagat			1380
aggagctgga	gtggcagaaa	tatgcagaag	aatgcaaagg	catgattgtt	accaaccctg	1440
			aactggatcg			1500
			ggatacgccc			1560
	tgtgaaactt					1594

<400> 5093

<sup>&</sup>lt;211> 1077

<sup>&</sup>lt;212> DNA

```
<222> (1)...(784)
     <223> similar to gi3128218 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5094
ccacagctat ttacaggaat tctttctccc tggaaaggac tactgctgta cggccctcca
                                                                        60
ggtacaggaa agactttact ggccaaagct gtggccactg aatgtaaaac aaccttcttt
                                                                       120
aacatttctg catccaccat tgtcagcaaa tggagagggg attcagaaaa actcgttcgg
                                                                       180
gtgttatttg agettgeeeg etaceaegee ceateeaega tetteetgga egagetggag
                                                                       240
teggtgatga gteagagagg caeagettet gggggagaac atgaaggaag cetgeggatg
                                                                       300
aagacagagt tactggtgca gatggatggg ctggcacgct cagaagatct cgtatttgtc
                                                                       360
ttagcagett ctaacetgee gtgggagetg gaetgtgeea tgttaegeeg eetggagaag
                                                                       420
aggattetgg tegatetece cageegggag gecaggeagg ceatgateta ceaetggetg
                                                                       480
cctcctgtga gcaagagcag ggccttggag ctgcacacag agctggagta cagtgtgctg
                                                                       540
agccaggaga ctgagggcta ctcaggctca gatattaagc tcgtctgcag ggaagcagcc
                                                                       600
atgeggeeeg tgaggaagat etttgatgea ettgaaaate accaqteaqa aaqeaqeqae
                                                                       660
ttacccagga tccagttgga tatagtaacc actgccgact ttctqqatqt qctaactcac
                                                                       720
accaagecet eegcaaagaa tetggeteag agatacteag actggeaaag agagttegag
                                                                       780
tetgtetgaa accacattta eeetgaeetg geeacaaagg caaccacaaa gaeeteetag
                                                                       840
tttattaatg tccgtgggag aacaaaatga ttggaatgga aaagagaaaa ttatttttga
                                                                       900
agactggatt aacttgagcc actgtattgt tittggatagc tgagatatat tiattaactt
                                                                       960
accattatcg atgtcagcaa aatattgaga gtttcagtta catacatata tgtgctattg
                                                                      1020
ggtcatacaa tggagatttt tctgacaatt agactccata aaattttaat gaacaaa
                                                                      1077
     <210> 5095
     <211> 375
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(376)
     \langle 223 \rangle n = a,t,c or g
     <220>
     <221> misc_feature
     <222> (5)...(332)
     <223> similar to gi29648 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
```

<213> Homo sapiens

<221> misc\_feature

<220>

<400> 5095

60

120

ttcgagcttt tacatcatag agtctggcga agtgagcatc ttgattagaa gcaggactaa

atcaaacaag gatggtggga accaggaggt cgagattgcc cgctgccata aggggcagta

```
<210> 5096
<211> 1538
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(311)
<223> similar to gi4572367 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5096
tgcacctctg tgcggagacc aaggatgatg ccctagcatg gaagacagca ctgctggagg
                                                                       60
caaactccac ceeggtgege gtetacagee egtaceaaga etactaegag gtggtgeeee
                                                                      120
ccaatgcaca cgaggccacg tatgtccgca gctactacgg accgccctac gcaggccctg
                                                                      180
                                                                      240
gegtgaegea egtgatagtg egggaggate cetgetaeag egeeggegee eetetggeea
                                                                      300
tgggcatgct tgcgggagcc gccactgggg cggcgctggg ctcgctcatg tggtcgccct
getggttetg agecetggga eteggageae tgaeceetge gettggattg etagaeteet
                                                                      360
cttcctcctg gaccccatcc tctaccatcc aagccctgtc ccactttggc cctatcctct
                                                                      420
ccattagete etteegggtt tggaccatte eccecactee etaccettaa tecceacatg
                                                                      480
ggaagaaget atcatcacag gtacaaacat egettgaagt etteacatet accactagac
                                                                      540
                                                                      600
acceccaaaa tetgttatag acatttatgg atacatttee tetaaacaca acagggeaca
gcaaatacga cttcatttgg cttcgagttc cccaggcgct gtagacacaa catgaatcgg
                                                                      660
getetetget eteteettag ggagetegag teetggtggg gagaacagga gtaaacaagg
                                                                      720
acttgacaaa gctgaagagt tatcagtcct ttgacaagga caggtggggc agggagcaag
                                                                      780
acaggtaggc tggaagaaca gttattggca agtatgcaga gccgtgaacg tcatggcatg
                                                                      840
tccaaggaat taaatgggäg ttcatttggg ctggggtgga ggctgggatc agaccgtggt
                                                                      900
gggccttcaa gctaaggagc ttcctaggtg aaaggggaga tgtgagcctt ctctggaggg
                                                                      960
aagtttcatg attgcatcta taatgaatat attgcctgtt ttgtgaatac tgacacatgt
                                                                     1020
ccatacctaa aacactcctg agttaagtcc catccttccc acaaacagct tcctggctgg
                                                                     1080
tacccatgat aacaattgag ctgaacctgg ggacccctgg ttgggggaaca ggtgagttct
                                                                     1140
atttgagact tecageceta gaaagetgee teegteeaga aatgeetete acaceaggag
                                                                     1200
cteggecete tetttgtage tgtgactgte acceteteag getttgtete atcetteatt
                                                                     1260
ctgaataaga tggcagtgtt ctcctctggg gcctgatcca cctctacacc agcccaggaa
                                                                     1320
geoceatetg tgeetgeeet eaggtggtee accagtetee ceetttggtt ceetteeagt
                                                                     1380
ctcttccccc tttctatccc aatcaccaat agaaatgcta acatccctgc ctggtagcca
                                                                     1440
gactagecea ctaaagetee cetgtaaatg ggggeteeat tagttetget geegagaeta
                                                                     1500
ataaagattt ggttggctct agccgtacaa aaaaaaaa
                                                                     1538
```

```
<211> 426
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)...(340)
<223> similar to gi5771403 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

# <400> 5097 tttcgtgttt cagaggcccc tcggtttgag tccatcatgg aggacgtgga ggtgggggct 60 ggggaaactg ctcgctttgc ggtggtggtc gagggaaaac cactgccgga catcatgtgg 120 tacaaggacg aggtgctgct gaccgagagc agccatgtga gcttcgtgta cgaggagaat 180 gagtgeteec tggtggtget cageaegggg geceaggatg gaggegteta caectgeace 240 geccagaace tggegggtga ggteteetge aaageagagt tggetgtgea tteageteaa 300 acagctatgg aggtcgaggg ggtcggggag gatgaggacc atcgaggaag gagactcagc 360 gacttttatg acatccacca ggagatcggc aggggtgctt tctcctactt gcggcgcata 420 gtggag 426

```
<210> 5098
<211> 5205
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3)...(2964)
<223> similar to gi5689401 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5098
ggaacctcaa cccggtgtgg gaggagaatt tccactttga atgtcacaat tcctccgacc
                                                                       60
gcatcaaggt gcgcgtctgg gacgaggatg acgacatcaa atcccgcgtg aaacagaggt
                                                                      120
tcaagaggga atctgacgat ttcctggggc agacgatcat tgaggtgcgg acgctcagcg
                                                                      180
gegagatgga egtgtggtae aacetggaea agegaactga caaatetgee gtgtegggtg
                                                                      240
ccatccggct ccacatcagt gtggagatca aaggcgagga gaaggtggcc ccgtaccatq
                                                                      300
tecagtacae etgtetgeat gagaacetgt tecaettegt gacegaegtg cagaacaatg
                                                                      360
gggtcgtgaa gatcccagat gccaagggtg acgatgcctg gaaggtttac tacgatgaga
                                                                      420
cageceagga gattgtggae gagtttgeea tgegetaegg egtegagtee atetaecaag
                                                                      480
ccatgaccca ctttgcctgc ctctcctcca agtatatgtg cccaggggtg cctgccgtca
                                                                      540
tgagcaccet getegecaac atcaatgeet actaegeaca caccacegee tecaccaacg
                                                                      600
tgtctgcctc cgaccgcttc gccgcctcca actttgggaa agagcgcttc gtgaaactcc
                                                                      660
tggaccaget geataactee etgeggattg acetetecat gtaceggaat aaetteecag
                                                                      720
ccagcagece ggagagaete caggaeetea aatecaetgt ggaeettete accageatea
                                                                      780
cettettteg gatgaaggta caagaactee agageeegee eegageeage caggtggtaa
                                                                      840
aggactgtgt gaaagcctgc cttaattcta cctacgagta catcttcaat aactgccatg
                                                                      900
```

```
aactgtacaq ccgggagtac cagacagacc cggccaagaa gggggaagtt cccccagagg
                                                                      960
aacaggggcc cagcatcaag aacctcgact totggtccaa gotgattacc otcatagtgt
                                                                     1020
ccatcattga ggaagacaag aattcctaca ctccctgcct caaccagttt ccccaggagc
                                                                     1080
tgaatgtggg taaaatcagc gctgaagtga tgtggaatct gtttgcccaa gacatgaagt
                                                                     1140
acgocatgga ggagcacgae aagcategte tatgcaagag tgccgactae atgaacetee
                                                                     1200
acttcaaggt gaaatggctc tacaatgagt atgtgacgga acttccctcc ttcaaggacc
                                                                     1260
gegtgeetga gtaccetgea tggtttgaac cettegteat ceagtggetg gatgagaatg
                                                                     1320
aggaggtgtc ccgggatttc ctgcacggtg ccctggagcg agacaagaag gatgggttcc
                                                                     1380
agcagacete agageatgee etatteteet geteegtggt ggatgtttte teecaactea
                                                                     1440
accagagett tgaaateate aagaaaeteg agtgteeega eeeteagate gtggggeaet
                                                                     1500
acatgaggeg ctttgccaag accatcagta atgtgctcct ccagtatgca gacatcatct
                                                                     1560
ccaaggactt tgcctcctac tgctccaagg agaaggagaa agtgccctgc attctcatga
                                                                     1620
ataacactca acagctacga gttcagctgg agaagatgtt cgaagccatg ggaggaaagg'
                                                                     1680
agetggatge tgaageeagt gacateetga aggagettea ggtgaaaete aataaegtet
                                                                     1740
tggatgaget cageegggtg tttgetacea gettecagee geacattgaa gagtgtgtea
                                                                     1800
aacagatggg tgacatcett agecaggtta agggcacagg caatgtgeca gecagtgeet
                                                                     1860
gcagcagegt ggeccaggac geggacaatg tgttgcagec cateatqqac etqetqqaca
                                                                     1920
gcaacctgac cctctttgcc aaaatctgtg agaagactgt gctgaagcga gtgctgaagg
                                                                     1980
agetgtggaa getggttatg aacaccatgg agaaaaccat egteetgeeg eeecteactg
                                                                     2040
accagacgat gategggaac etettgagaa aacatggcaa gggattagaa aagggcaqgg
                                                                     2100
tgaaattgcc aagccactca gacggaaccc agatgatctt caatgcagcc aaggagctgg
                                                                     2160
gtcagctgtc caaactcaag gatcacatgg tacgagaaga agccaagagc ttgaccccaa
                                                                     2220
agcagtgege ggttgttgag ttggeeetgg acaccateaa gcaatattte caegegggtg
                                                                     2280
gegtgggeet caagaagace tteetggaga agageeegga cetgeaatee ttgegetatg
                                                                     2340
coctgtcact ctacacgcag gccaccgacc tgctaatcaa gacctttgta cagacgcaat
                                                                     2400
cggcccaggg cttgggtgta gaagaccctg tgggtgaagt ctctgtccat gttgagctgt
                                                                     2460
teacteatee aggaactggg gaacacaagg teacagtgaa agtggtgget gecaatgace
                                                                     2520
tcaagtggca gacttetggc atetteegge egtteatega ggteaacate attgggeece
                                                                     2580
ageteagega caagaaacge aagtttgega ecaaatecaa gaacaatage tgggeteeca
                                                                     2640
agtacaatga gagetteeag tteaegetga gegeegaege gggteeegag tgetatgage
                                                                     2700
tgcaggtgtg cgtcaaggac tactgcttcg cgcgcgagga ccgcacggtg gggctggccg
                                                                     2760
tgötgcágot gegtgagetg gedcagegég ggagegeegé etgetggetg eegeteggée
                                                                     2820
geogratica catggacgae acgggeetea eggtgetgeg aatceteteg cagegeaqea
                                                                     2880
acgacgaggt ggccaaggag ttcgtgaagc tcaagtcgga cacgcgctcc gccgaggagg
                                                                     2940
geggtgeege geetgegeet tagegegge ggteggeega geggeaetge geetgegegg
                                                                     3000
agggcgctgg gcggggaggg acggggcttg cgccttggtg ggacctcccc aggggcgggg
                                                                     3060
ctegggggge tecaegecaa gggtgggetg egectaegee ettgaeteag ettteeettt
                                                                     3120
tggggaatta ggaatggagg atgeeeegee etetegggag geeaegeeea agggegegae
                                                                     3180
gaaggaagga gccacatccc caacttgagg ccacgcccc agcacctagg gggcattttg
                                                                     3240
agccgggatg ggggaaacct cgtccctatg gaggaggcca catcccgggg ctctggtacc
                                                                     3300
gggaggcacc acctcatgtc ccctggaaaa gccataagat gggacccaga cccctgggac
                                                                     3360
cccagaccaa ttgccaagta tggaaatctc agctccctcg agggggggcc ctgggcaagg
                                                                     3420
ggtagggete tetggagege ecetetaggt ggeetgggga etggagggae eaggatgetg
                                                                     3480
gttggagggt cccggaatac cggagtccct ttagatattt gtgcaaaaaa taaatggggg
                                                                     3540
gagggggag gatgggattt caaaagcaca tgcgcccttg ggcgcccaaa ccctgggggc
                                                                     3600
cgaggggacg getetggtte eccaegetge ecctaettee etttgggagt ttgeetetee
                                                                     3660
ctctcccca acaaacccag tcctcatatc atagagttca acacacccat ttgacagatg
                                                                     3720
gcaaaactga ggcttaaaga gctgcttgag acttggccaa ggttccaggt gccataccct
                                                                     3780
ctgtgcccct cccttaggcc tgtgtgcccc atggaagggt gggctgagat cgggatgacc
                                                                     3840
tgacacaget cectattget getaatteec ceteggeete etecaagggg tgggaattee
                                                                     3900
aggecaagae ecetaetteg cettteette teeggetgee aageaggaee tttgeeetea
                                                                     3960
gecetttete etgggatete catgggggat gecatgaggg ceteceacea caaaagagaa
                                                                     4020
tttgggatcc cctggtccca ggtttctcca tcccttcttc cttttccaga attttccaaa
                                                                     4080
taggaaagaa cagaaggaga ccagaaactc taggggggag aaagagaatg agagaaagag
                                                                     4140
aatgagagag agagaaacac aaacacagtg acacagtgag agcttagtct ccaagagcct
                                                                     4200
atteattgat teaaacacce aagceacagg ataceteaga tggeeetett geeagetgga
                                                                     4260
agetetttet ecaatgagea aagttacagt gaeetggetg gagttacetg gtgeacatag
                                                                     4320
```

```
gacettaggg gaaagtteag egtggactae acttgetetg ggatetgett ttecaeatgt
                                                                     4380
gtgtatggca cgcctttttc tgctggattg ggaaggacaa gattttgctg tgctagggag
                                                                     4440
aàatgaaaac ggggtgagct gagtagctgg gtttctggag gatagaacat cagatgggga
                                                                     4500
                                                                     4560
ggctttccga ggtgaagaat gagagggaac cacttactag agagaaaaga gctccaggcc
tggggaacag cacgtgcgaa ggccaggaga gaagaactgt tgaaacaacg agaagggtgg
                                                                     4620
cacggctgga gctgagccag caagggggat cgtgaggagc cttggggttg gggagatctg
                                                                     4680
                                                                     4740
cagaagcatc agaccaggca gggcctcgta cgcagtcctg aggagtttta cttttattct
aagacagttg gggageteca ggagetgttt taagttgggg agagaetgga ttecageetg
                                                                     4800
caaaagctgt tttgtgaaga ctaaaaccag tgaggagagg tggaggtgct ttggggacac
                                                                     4860
                                                                     4920
tgaaatggat tettggaaag attetgaagg etgtgttgaa aagacaceta tagetgtggg
gacatgacta taatcccagc atttggggag accgaggctg gcagatcact taaggtcagg
                                                                     4980-
agtttgagac cagcctggcc aacatggcga aaccccatct ctgctaaaaa tacaaaaatt
                                                                     5040
agetgggtge agtggtgcat geetgtagte ceagetacte aggagaetga ggegggagaa
                                                                     5100
ttgtttgaac cctggaggca gaggttgtag tgagtcgtga tcacacaact gcactccagc
                                                                     5160
ctgggcaaca gaacaatact ccattccctc ccctctaccc cacca
                                                                     5205
```

```
<210> 5099
<211> 2494
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(813)
<223> similar to gi5912067 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5099
geetgagate tecagggage aggeeatege geteetcaag gaccaggage egggggeett
                                                                       60
catcatccgc gacagtcact ccttccgagg cgcgtacggg ctggccatga aggtgtcttc
                                                                      120
gccacctcca accatcatgc agcagaataa aaaaggagac atgacccatg agctggtcag
                                                                      180
gcattttctg atagagactg gccccagagg agtcaagctc aagggctgcc ccaatgagcc
                                                                      240
aaacttegga tegetgtetg ceetggteta eeageactee ateateeeat tggeeetgee
                                                                      300
ttgcaagctg gtcattccaa accgagaccc cacagatgaa tcgaaagata gctccggccc
                                                                      360
tgccaactca actgcagacc tgctgaaaca aggggcagcc tgcaatgtgc tcttcgtcaa
                                                                      420
ctctgtggac atggagtcac tcactgggcc acaggccatc tctaaagcca catctgagac
                                                                      480
gttggetgea gaccecaege cagetgecae categtteae tteaaagtet etgeecaggg
                                                                      540
aatcactetg actgacaacc agagaaaget etttttcaga egecactace etetcaacac
                                                                      600
tgtcaccttc tgtgacctgg atccacagga aagaaagtgg atgaaaacag agggtggtgc
                                                                      660
ecctgetaag etettegget tegtggeeeg gaageaggge ageaceaegg acaaegeetg
                                                                      720
ecacctettt getgagettg acceeaacca geeggeetet geeategtea acttegtete
                                                                      780
caaggtcatg ctgaatgccg gccaaaagag atgaaccctg ccccttgccc agggccagtg
                                                                      840
ccatggggaa ggggcttgtg gggaggggac ccatgaatcc tgaccactct tgaacccaga
                                                                      900
aggaggactt tgggccaatt tcggaggaga gaagaaagtg caacgtgggg agagggaagt
                                                                      960
gaattgcaga ggggaggggg aaaagagaga gagagagaga gagagagaga gagagaaaga
                                                                     1020
tgggggagaa gaacttggat tcccctgggt agatggaaac tgcaaaaacc caaagcctcc
                                                                     1080
aaaactaacc aggtccacct aacaccccct ccctccccta agaagatgga tgtcctcaaa
                                                                     1140
agagaaggaa caaacctcct tgggaatcca cattttttgg gggaatggaa aagctctgtc
                                                                     1200
tecetaaete aactgetttg caaggggaaa teaagetggg agaatetttt tetggeeace
                                                                     1260
tgtagggtag gttgtcaaac caaacagagc caccgtggga catcaagtgg aagaacttgt
                                                                     1320
```

>

```
ttgcttgaaa gtatctcaga cccaaggcac ctcaggtctc tttgctgtgc ctccactata
                                                                     1380
                                                                     1440
ttgtcgtqtq ggtgtgtgtc tgcacccaca tcctcacaca ttgatctaga tctgccttta
                                                                     1500
tccactcgaa ttataaacag ctcggcttgt ccttgtccca tgtgtttgta gacacacatg
                                                                     1560
catactgtcc aaagattagg gttggtggtg gcagtgcagc aggggaggga caaacaacca
                                                                     1620
agetatgggt gacagagget eteteetggt geetgeacet geactetagt gaccetgggt
                                                                     1680
geogecagae cettetette tacaaagaee eeageaggag tgggagggte tgeaatggea
                                                                     1740
tegecetgte etgeettgge eagaageetg gagetttggt ttgaggaggt agagatatgt
gtatccatag gaagagatct gtcagaacag gcagctgttg agctcggggt gtcttcccca
                                                                     1800
aggeatgtgg eteageagea agaaaggeaa gttgeteetg etggggeeet ggaetetgee
                                                                     1860
ttagetecea ecteteagee ttgttattgg gttteatgee eetggaeeag eettatetea
                                                                     1920
gacctgctta cctgcatgat gcctttttgg gggctgggga ttgagtcttg ctgctctgcc
                                                                     1980
cagocotgtt ctattotgca gggtccctgt gttggaattc tccctgggga acctactttc
                                                                     2040
tgctcagtga ggctccggcc agaaacctgg agtccttatc ctcccctctg taagtgtttt
                                                                     2100
agggtetgge ttttgeagge accetetgae etcageagag etcetgggee tgetgeetge
                                                                     2160
acaccacate geetacetae aatgeeaaag ceteaetgte accetttetg cettggttte
                                                                     2220
cctagctgag ccacgctgcc catgcagcag agggcagaag gcttgcactt gggccaaagg
                                                                     2280
gectaaggte caetggacag ttgggaaaac acetgaccae catttaagga etetaageca
                                                                     2340
gaatggaaaa ttcaccagga ctccattctt aagcctatgc gagtccccta gagagaggca
                                                                     2400
ttgtactgat atataaatat tatataatat atacatgaga catactgaca gaatctgtaa
                                                                     2460
gctaataaaa tgtaagaaaa ggttaaaaaa aaaa
                                                                     2494
```

```
<210> 5100
<211> 683
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(529)
<223> similar to gi2232013 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5100
gtatggggtc cacacaggaa agaaaccaaa ctgttttggg gaatatggaa aaggcttcat
                                                                       -60
tccgaggctg gatttgtgta agcatgggac gatccacaca ggagagaaac catataattg
                                                                      120
taaagaatgt gggaagaget teagaeggte eteetatett ttgateeate agegagteea
                                                                      180
cactggagaa aagccataca aatgtgacaa gtgtgggaag agctacatta ctaagtcagg
                                                                      240
tettgaettg caccacagag decacacagg agagagaeet tataactgtg atgaetgtgg
                                                                      3.00
gaagagettt agacaggeet caagtatttt gaateataag agacteeatt geegaaaaaa
                                                                      360
accattcaaa tgtgaggatt gtggaaagaa gcttgtatac cggtcatacc gtaaagacca
                                                                      420
acaaaaaaac cacagtggag aaaatccatc caaatgtgaa gactgtggga agcgctacaa
                                                                      480
gaggegettg aatettgata taattttate attatttta aatgacaegt aagtgttgta
                                                                      540
catatttatg gggtacagtg tgatatttaa atatatgtat atgatgtata atgatcaaat
                                                                      600
cagtgtaatt agcacattta tcacctcaat tatctctttt ttgtgttgag aaaattaaaa
                                                                      660
attcattgtt ccaaaaaaaa aaa
                                                                      683
```

```
<210> 5101
<211> 393
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (52)...(139)
<223> similar to gi603672 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

# <400> 5101 aagcattgtg gaattgtggg tgttaagttt tgtttgtttg ttttttaata ggcttattat 60 gcccgtgatg ctctggctaa aaacctctac agcaggttgt tttcatggtt ggtaaatcga 120 atcaatgaaa gcattaaggt actgaatttc tatgagcaaa atcagttgta ataaatggta 180 ttcacagtat aaacattaag ttgaagaaag tttaaattta taatcaaata attgattgcc 240 acttacaaag attattcctt aaaaagagtg taccatgtat aagattgaaa tttgtcaggg 300 attttgttta ttttgttttg ccatgtgtgt tgcttctgac tggtgaatag tctgatggtc 360 tttgtggagt tactctggga gtcggcgtcc cag

```
<210> 5102
<211> 1838
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(208)
<223> similar to gi1770576 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5102
tcaggtttat gatgggtttt cattcattgg caacactgga ccttacgagg tttctaagaa
                                                                       60
gctgtatacc ttgaaacaaa gtttggccaa agtggagaat gcttgttatg ccttgaaagt
                                                                      120
cagagggtca gaaattccaa aacatatgtt ggcagatgtg ttttcagtta aaacagaaat
                                                                      180
gatagatcaa gaagagggca tttcttagaa tctaacgtta ctcagttact aattcttttg
                                                                      240
agaacteeta agagaccaat ttgtaagaet tatttagtat tteatttaae tttattgtgg
                                                                      300
cttttacata gaaacatatt cagttgtact tgttttaaat tgtatacaag ctgtacataa
                                                                      360
aattagccaa atgaatcatt tottatatot tattcatgaa agtttgcata cagatgtttg
                                                                      420
catatatgcc tttttgaatt tttgctggtt aacctttatc atttatcttt gtaatgtgaa
                                                                      480
catgottcag agtgtacctt ttgccataac ctattttaat ttactttttc tgaagtttgg
                                                                      540
agtgataatt tttagtggaa gcaatttgta atttaagttg gtagttatat tatatataga
                                                                      600
aaagattttt tagttaaact totggacatg agogtootgt ttaaatttot tgttaatato
                                                                      660
gtgccaagcc tcaaaaatag gcttattcca tggaacaaga attaaaaatg aataagctat
                                                                      720
caatatataa tttaagtaca agtttaggct gggcgtggtg gctcacgcct gtaatcccag
                                                                      780
cactttggga ggccgaggta ggcagatcac gaggtcaaga gatcaagacc agcctgacca
                                                                      840
acgtggcgaa acctcgtctc tactagaaat acaaaaatta gctggatatg gtggtatgtg
                                                                      900
```

```
cctgtaatcc cagctacttg ggaggctgag gcaggagact cgcttgaacc tgggaggcag
                                                                      960
aggttgcagt gagccgagat tgcgccactg cactccagcc tgggtaacag agcaagactc
                                                                     1020
                                                                     1080
catctcaaaa aaaagaaaga aagaaaaaaa gaaagtacaa gtttataaag tattatagtg
aaaaattcgc attctggctg attttaagcc atttaaaatt tatataaaac aaccttccat
                                                                     1140
aaaaatttga caggtgccca gatgttgctt tctccattta ttttttgttt ttttttaatc
                                                                     1200
acagtaggtc tgatagagaa ttggagctaa attataatat ttttgttggt aaagttgagt
                                                                     1260
tatatacttg tacatacaat ggaaatgctt ttagtagtga ttatttagca atttttgttt
                                                                     1320
ttgttatatt aggcatgttt ggaggctttc ctattctagc atttaaattt aaattttatt
                                                                     1380
aaaattaaat aatttaaatc tagcatttaa atttaaataa tttaagtcta gcatttactt
                                                                     1440
ttaaataatt ataatgaagt tttgaaatac taagttaatc cagaccttta gttgtcccat
                                                                     1500
ggtgttaata aagttgccaa agaagatgta ttatgaacaa ttcagcaata agacaattgt
                                                                     1560
caacacagtt gagaataaca atggtaatcg ttagtaatat ttagaattgg aatttgccta
                                                                     1620
ctgaaatagt tatagatgat tacttgtgat gtgaaactga attgagcatg acaaccagac
                                                                     1680
atttccagtt ggttttgtaa gttttgagaa tctagatact gggttttatt ttttgaaaga
                                                                     1740
ttagctctgt ttgtaagggc tgattccttg aaaatgtaat tttccagaaa aacacctaaa
                                                                     1800
gaaaataaaa catggacatg cctagtaaaa aaaaaaaa
                                                                     1838
```

```
<210> 5103
<211> 1646
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (40)...(291)
<223> similar to gi606976 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5103
taccgggccg gaatctcccg cgtccgcca cgcgtccgct tcatctatca cctgcctcag
                                                                       60
gagtttggtg atgcggaact catacagaca ttcctgccct ttggagccgt tgtctctgct
                                                                      120
adagtettig tggategage caccaaccag ageaagtgit tigggittigt tagtittigae
                                                                      180
aatccaacta gtgcccagac tgctattcag gcgatgaatg gctttcaaat tggcatgaag
                                                                      240
aggeteaagg tecagetaaa geggeecaag gatgeeaace ggeettaetg acetgettte
                                                                      300
actgaccage cacagaaaga aacagaagag tgagaagaaa ggagaggaaa agcacagaaa
                                                                      360
cgcttgagca gccctttccc gaaggagcag ctgcggacgg aggtggatcg gacccaaggc
                                                                      420
tggtgcctgg ggctaaggcc actctaagga ttgtttttat caagtgggtt gttctgtgcc
                                                                      480
tgcagcatag agcgcaggct ggcagagcaa atagggctgg tgaggagtga ctgtccaggg
                                                                      540
gaaccagcag agggcgttgg gggtgccaag ggcttctccg caagggaagc ccagatttac
                                                                      600
ttctttcaaa atcatatcat tccttagagt ttagggacca aaggactatt gctttttaa
                                                                      660
gaatatatat atctatataa attaaaacaa agaaacaaac aaacaaaaaa caagacaaac
                                                                      720
aactacaaaa aaagacagta tagagtotoa taaaagotgo otttaaatat oootaggaga
                                                                      780
cagggtgaag gagaccettg acagececag cetaggeaga tgggggetgt ggaaagattg
                                                                      840
ttctgtgtct cattccctct taagccactc ccccaccctg cccttttaaa aataattaag
                                                                      900
gatttgaggt ctaggctcac atgcaggtaa ttagaacgtt atggaagcag tgaacccaca
                                                                      960
atccacaatc cccaaactca gagtgcatcc cagaagaggc cccaggcaga gctcaggttg
                                                                     1020
gccctggcct ttgccatccc gggaggcccc ctagccagca agagtgggat tgcctttcct
                                                                     1080
gtggaaccac tgcttcccca ggcgggaaga aagagggagt tctggccacc tgagcctttc
                                                                     1140
cettgecaat ceaggaagae agaggeeetg cetttggetg agetgagaea cetectgttt
                                                                     1200
coefficeet tgaaccagte coagtgtoce ettgetecag getacettet gtetettagt
                                                                     1260
```

```
ctaagtttgc ccacctgtaa agtagattca ggatatctgt agagggctgt gacaacagac 1320 ttggaaggtt tgctactgta tatactgcca ttgagaaggg gaaatttttc aatatgtaga 1380 agcttcagaa ttagaggtcc ctctttaccc cagacctggg agggaagtag atgttttgcc 1440 aaaatacttc ttcattcctt taaaaactac atctttccta tgcaagagtg tctcacatgt 1500 gcttaaccga ggtgcttcta gttggtgagc agtgttgagc ttaaaagtgg ggtgtgctct 1560 gtctgtctgt ctttgtctgt ctgttgtata cagtgggtgc catataaagc tgatcaatgg 1620 tggtgctcc tgcctggctt ctgtgg
```

```
<210> 5104
<211> 1746
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (699)...(1629)
<223> similar to gi3851703 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

# <400> 5104 geggeegeet aetggagaea eteceteeeg ceteeegggt eteetggegg eggeggagtg 60 aggetgaeag egtgggaace tgtggagaee ceteegeeet eeeegeggtg geageggeeg 120 180 atccccggct ccggcgcgag acgacggccg cgatgcgctc ggcctgaggt tacccgggcc 240 egeceettte etegetteee tegaetatte caetgegtet eegegeeeeg gegteateet gegagteeet etgaegggag ggaagatgge tgeaeggage tggeaggaeg agetggeeea 300 gcaggccgat ggagggctcg gccggacatg cgggaaatgc tctcggtcgg cctaggcttt 360 ctgcgcaccg agctggggcc tcgaccttgg ggctggagcc gaaacggtac cccggctggg 420 tgatectggt gggeactgge gegeteggge tgetgetget gtttetgetg ggetaegget 480 gggccgcggc ttgcgccggc gcccgcaaaa agcggaggag cccgccccgc aagcgggagg 540 600 aggeggegge egtgeeggee geggeeeeeg aegaeetgge ettgetgaag aateteegga gcgaggaaca gaagaagaag aaccggaaga aactgtccga gaagcccaaa ccaaatgggc 660 720 ggactgttga agtggctgag ggtgaagctg ttcgaacacc tcaaagtgta acagcaaagc 780 agccaccaga gattgacaag aaaaatgaaa agtcaaagaa aaataagaag aaatcaaagt 840 cagatgctaa agcagtgcaa aacagttcac gccatgatgg aaaggaagtt gatgaaggag 900 cctgggaaac taaaattagt cacagagaga aacgacagca gcgtaaacgt gataaggtgc 960 tgactgattc tggttcattg gattcaacta tccctgggat agaaaatacc atcacagtta 1020 ccaccgagca acttacaacc gcatcatttc ctgttggttc caagaagaat aaaggtgatt ctcatctaaa tgttcaagtt agcaacttta aatctggaaa aggagattct acacttcagg 1080 tttcttcagg attgaatgaa aacctcactg tcaatggagg aggctggaat gaaaagtctg 1140 taaaactete etcacagate agtgeaggtg aggagaagtg gaacteegtt teacetgett 1200 ctgcaggaaa gaggaaaact gagccatctg cctggagtca agacactgga gatgctaata 1260 caaatggaaa agactgggga aggagttgga gtgaccgttc aatattttct ggcattgggt 1320 1380 ctactgctga gccagtttct cagtctacca cttctgatta tcagtgggat gttagccgta atcaacccta tatcgatgat gaatggtctg ggttaaatgg tctgtcttct gctgatccca 1440 actictgattg gaatgcacca gcagaagagt ggggcaattg ggtagacgaa gaaagagctt 1500 cacttctaaa gtcccaggaa ccaattcctg atgatcaaaa ggtctcagat gatgataaag 1560 aaaagggaga gggagctctt ccaactggga aatccaaaaa gaaaaaaaa gaaaaagaag 1620 aagcagggtg aagataactc tactgcacag gacacagaag aattagaaaa agagattaga 1680 gaagacette cagtgaatae etetaaaace egtecaaaac aggaaaaage ttttteettg 1740 aagacc 1746

```
<210> 5105
<211> 3172
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2191)
<223> similar to gi3319990 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5105 gttatgaagc accacaaact gttgcggttg aacctccacc tatcaagtca gcagtacaga 60 egatgtgtee catacetgee cattetttgg etgettttgg attatttett egtetteegg 120 gctatgcgga agtgctactg aaagagagaa aacatgccca gtgccttctt cgattggtat 180 tgggagtgac agatgatgga gaaggaagtc atattettca atetecatea gecaatgtge 240 ttccaaccet teetttecae gteettegta gettgtttag cactacacet ttgacaactg 300 atgatggtgt acttetaagg eggatggeat tggaaattgg ageettaead eteattettg 360 tetgtetete tgetttgage čaccattece caegagttee aaactétage gtgaateaaa 420 ctgagccaca ggtgtcaagc tctcataacc ctacatcaac agaagaacaa cagttatatt 480 gggccaaagg gactggcttt ggaacaggct ctacagcttc tgggtgggat gtggaacaag 540 cettaactaa geaaaggetg gaagaggaac atgttacetg cettetgeag gttettgeca 600 gttacataaa tcccgtcagt agtgcggtaa atggagaagc tcagtcatct catgagacta 660 gagggcagaa cagtaatgcc cttccttctg tacttctcga gcttctcagt cagtcctgcc 720 teateceage catgicatet tatetaegaa atgatteagt tetggacatg geaagacatg 780 tgccactcta tcgggcactg ctggaattgc ttcgggccat tgcttcttgt gctgccatgg 840 tgcccctatt gttgcccctt tctacagaga acggtgaaga ggaagaagaa cagtcagaat 900 gtcaaacttc tgttggtaca ttgttagcca aaatgaagac ctgtgttgat acctatacca 960 accetttaag atctaaaagg gaaaatetta aaacaggagt aaaaccagat gcetctgatc 1020 aagaaccaga aggacttact cttttggtac cagacatcca aaagactgct gagatagttt 1080 atgcagccae caccagtttg eggcaagcaa atcaggaaaa aaaactgggt gaatacteca 1140 agaaggegge tatgaaacce aaacetttgt cagtattaaa gteaettgaa gaaaaatatg 1200 tggctgttat gaagaaatta cagtttgata cgtttgaaat ggtttctgaa gatgaagatg 1260 ggaaattggg atttaaagta aattaccact acatgtctca ggtgaaaaat gctaatgatg 1320 cgaacagtgc tgccagagct cgccgccttg cccaggaagc tgtgacgctt tcaacctcac 1380 tgcctctgtc ttcatcctct agtgtgtttg tacgctgtga tgaggagcga cttgatatca 1440 tgaaggttot aataactggt ccagcggaca ccccttatgc aaatggctgc tttgagtttg 1500 atgtgtattt tcctcaagat tatcccagtt cacccctct tgtgaatcta gagacaactg 1560 gtggtcatag cgtgcgattc aatccaaacc tttataatga tggcaaggtt tgtttaagca 1620 tettaaacae gtggeatgga agaecagaag agaagtggaa teeteagaee teaagettti 1680 tgcaagtgtt ggtgtctgtc cagtccctta tattagtagc tgagccttat tttaatgaac 1740 cgggatatga acggtotaga ggcactccca gtggcacaca gagttotcga gaatatgatg 1800 gaaacattog acaagcaaca gttaagtggg caatgctaga acaaatcaga aaccettcac 1860 catgttttaa agaggtaata cacaaacatt tttacttgaa aagagttgag ataatggccc 1920 aatgtgagga gtggattgcg gatatccagc agtacagcag tgataagcgg gtaggcagga 1980 ctatgtctca ccatgcagca gctctcaagc gtcacactgc tcagctccgc gaagagttgc 2040 tgaaacttcc ctgccctgaa ggcttggatc ctgacactga cgatgcccca gaggtgtgca 2100 gagecacaac aggtgetgag gagaetetaa tgeatgatea ggttaaaeee ageageagea 2160 aagaacteee eagtgaette eagttatgag etgeattgat gtggaettea tagacacaaa 2220

```
ggcttcgaag cacaagccaa atatgtcaat atttgtatgt aagaaactaa ttatgtaata
                                                                 2280
ggtaatgaaa ctgaaactat actatgccct taaggagatc cagtttaatt caaggtgatc
                                                                 2340
                                                                 2400
ttttatttac ctgtacagga gtgtaaactt ttttgtgctt ttatttttca attgtgagaa
ccactgattg gtatgttcaa caaatttgtg tatacaaaga aatggataaa tcactgctat
                                                                 2460
2520
tttactatag agtgaggggt tgttaacaaa gaatatatat tggtcattct tacaactact
                                                                 2580
atttaaagtc agcaactttt cactgaattt gatagatttt atgtttggcc atatcttcat
                                                                 2640
                                                                 2700
geteacattt gatttetgaa gaceteetae atacaettea ataaaagtta aatggacata
ctccctcttt tttgatttac tggtacattt ttaaaataat aaatctgcca taaaatgcat
                                                                 2760
tatatctgga gacttgcact tgtatggatg aatttattac attcaacata tttaatttta
                                                                 282.0
tgccttctaa ttctaagatg cagaaaaaaa taaatgaaca tgattttatt ctatgcccaa
                                                                 2880
catttgggcc tctgaatgta tctgttattt gaatttaagt atttgaaaag gaatggtcaa
                                                                 2940
tttgaaagte attetaaaet gatttttttt tteetaaagg geteettttt teetggaeta
                                                                 3000
tgtggtttta tgactaaagt cacatgtatg tattaaacat tgaggctctg tagaggagag
                                                                 3060
                                                                 3120
aggatgtacc tetetggtge tgttacagta cattetgtac etgecataca ggetcatttt
catgcaaatt cttcctagag ccaaataaat aaagacttag gtgaaaaaaa aa
                                                                 3172
```

```
<210> 5106
<211> 5618
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5619)...(4060)
<223> similar to gi5689389 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5106
ttttttttt ttcataaaga aagaaacggc aatgcaattt aaaaactggt aggccgttta
                                                                    60
aaagageegg titgaeetet gacaaaceea gecaagacaa ggeeeettgg eeeggetege
                                                                   120
gagtetttgt agagageaga gettaceetg aegaegatgg egttttgtgg ttaaagtgae
                                                                   180
ttgggcgcac ccccaggaca gggtctggtc ccacacgttc acaccagggg ggcgggaggg
                                                                   240
gggacatcaa aaacagacca catcetetge cagaeggget ceagggagta geggtttgga
                                                                   300
cgagggacat ttacaaagca cagagtgcac aaataagttt tggttaattt accaaattac
                                                                   360
acagcagtcc ttcaagtttt tcaagtttca taaaaaggag gaggggagga gaaaggggga
                                                                   420
480
ctgaagaaaa ataataaacc agattaacaa cacaactgta tcgctccaaa gacggacaga
                                                                   540
gaagitgaca ggttcacaca cggtttgcgg tatgtacatc aatttacaga ggttgcgacg
                                                                   600
caggggagag aggttcacac tcgtgttttc gctttgttag aggcgctcgg ccacacccag
                                                                   660
cacceatgtg tgeccagege acaegtgeac acgeacecca egeaeggeea caegegeace
                                                                   720
cacgeteget tgcacacacg cecacacgea cagacacgee tgegggeage aggegeaggg
                                                                   780
gagcgcgtat caccagtccg cgtcctcctc tatgtaataa tcaggggcgg taccatcaaa
                                                                   840
gaggccgggg tcgagggact tccgctgctt ccctctggcg aagacgcggg agatggagcc
                                                                   900
gaatcccatc ttctctttct tctttttccg tttttggtct tcaagatcct ctagtgactg
                                                                   960
tacaataggg ttgtgcaggt tcttctgaac tgggccggga ctgtcgccct gtagccagag
                                                                  1020
gagaagagga agatgaaaca gcagagacag gtgacacagg agagcagagg cggcccgtgc
                                                                  1080
ggtgtggggc cttccgtgga aggatgccat ctctcagggg ccaccctgcc tctgcagtgg
                                                                  1140
ggagcccacc ccccatctcc tgaagcagat acccccagat ggcttattga tggggcctgg
                                                                  1200
agttteecta gagtteetgg ggteetetee tgeeeagtet ggeeteteaa eecceageat
                                                                  1260
```

```
1320
cttctgacca acaaattagc cactccaggg cgtctaagtt cctgtcccag tctgtcctct
                                                                     1380
gagttagage tagagettgg ttagaettgg tgettteeat aaagaaatgt aettttatag
                                                                     1440
aaaaagcaca aaatagagaa ttttgggaca gaaacaaact tgggagacca cgtagcctct
                                                                     1500
agetteece acaacegaca caatgaatet ettagtttge geaggggeag geaggacteg
                                                                     1560
ttagccctat tcacagatat caagagaggc agcagacagt ccactaccgt ggagctaatt
                                                                     1620
ggatgcagag ctacagetec aattggggge tgtcagatte etectggeac agtgeteett
ccaggcagga gctccagggt aactgcatac ttggtcctga gctttgggct gccccaggag
                                                                     1680
                                                                     1740
gggtctgaac tccttccctt tttcctaggg agcctcagac gacaggtccc taggatgggc
                                                                     1800
aggtaggaca tittecattgt gttgccagcc ctgccttacg tgggtgtgga gggaaccctt
aatageetae aggtgtacaa aageetteae tacateeeag aateagtetg ceetgtetgg
                                                                     1860
agcccacaga tcctttggat caaaacagtc attactaggg agactcctgg tggttatttc
                                                                     1920
tggaattgca agcataatgc caaggtccgt caaccttctc caacctctct atgctgagtt
                                                                     1980
cctacttttg ctctaaatta gtggccagag tgtgagagga tgaggcagtc attagtccag
                                                                     2040
getgeactat tettgetggt ggaegteaga tgeecaagge aaagggttae etgtagetat
                                                                     2100
ttttgggctc ttcctggctt acctgcatgc acacctgttg agatgggggg ataaaaaggg
                                                                     2160
ttgaggaagt gagggaatta atgaatggta gtttagtctt tagtctcaag gtttgcaaac
                                                                     2220
                                                                     2280
agaatccatt ctgaaggcag ctaagatagt tccactctgg ataggaacat ctttgccaaa
tctatgggta aagagaatgg ggcctgctca ctgaaacgcc tgtatgcaga caactggctt
                                                                     2340
atcaaagcac ccatttcctg gcagcaggaa tgtgccaagg ctatggtggg caaaagacta
                                                                     2400
gggctgggtc aaatgcaatt caagaggcct ttggagaact ccttctgcag aatggggttt
                                                                     2460
ttccagcage atttctgctg ccagagtccc catgggccca ccacgagaag acaaaatatg
                                                                     2520
gccgtggggg gaaggtattc tcaactggga tgagaatggt gcagggacac tgctggctgt
                                                                     2580
aggtataact ccacagtggt ccttcaggat cagggaatgg atgtcagaga cccctccagt
                                                                     2640
ggcccacctt ccttgccttg gttctgttag tcaagataga ctttgtcact aggattctct
                                                                     2700
tctggggaca agagaagaac atactgcttc ctcaaagcac cagtataaaa cagagaatcc
                                                                     2760
cgccaggtgc agtggctcat gtctataatc ccagcacttt gggagactga ggtgggcaga
                                                                     2820
tegeetgagg teaggagttg aagaceagee tggeeaaeat ggtgaaatet eatetetaet
                                                                     2880
aaaaatacaa aaattagccg ggtgtgatgg caggcatctg taatgccagc tgctcgggag
                                                                     2940
gctgaggcag gagaattgtt tgagcctgga aggtgttggt tgcagtgagc tgagactgcg
                                                                     3000
tcactgcact ccatcctggg tgacaagagt gaaactccat cacacacaca tacaaataaa
                                                                     3060
taaaataaaa caataaaaaa gagaatccca ggcctgagca gggccccagg ctgcaaatga
                                                                     3120
cetteetact etgaggagge catetaaagt ceeegggeea geaatetetg eegeecaeet
                                                                     3180
gagcagactg aggcagcttc tctgaagttt actcttagct atttttataa gcacttttca
                                                                     3240
ttattgtgga ttgaaaaaaa tggttccata attacgactc atctatagga aagtgattga
                                                                     3300
tttttacaca ctgatttcca agcaacactg ttatgtacat gcttattatt cattctaata
                                                                     3360
gettttcaag ttattetett gagtteteca ggtagagaat catqtcactq qcaaqtaatq
                                                                     3420
gttttgtcca atgtgttcac ctcatttctt ttttattatc tatttcgctg gttaataaag
                                                                     3480
tgacattaac tgagttttgg aaaaagccgt ctcgtgcatt tgaggatcta accctatgat
                                                                     3540
gtctgtcttc aggatatggc agaggggagc ctctgcatta ccaactgtgt gataaaacaa
                                                                     3600
aaattcaagg tggtccccac acccagaccc caatatttca tgttagagcc tcgacatggc
                                                                     3660
ttccaactgt ceteagaage teaacecace tteaatttae teceacactg ttgcagagee
                                                                     3720
catctgtctg ccccactagt catcaagagc taggcagcta gggcctttgc ctcctqqqaq
                                                                     3780
ctggtgccca gtatgcaatc aaaaagtgtt tgatgaaata aacaaaggaa acaaacttag
                                                                     3840
accatattca caagcctctc cagaggcaat tcatgccaag actcctgggt caggatagag
                                                                     3900
agetggetet aaagggaaat gaggaggtge tggggaggee etgagetetg gaaggtaatg
                                                                     3960
tgtgggagga gaagcccacg gtcccagaca gggcccactg gggcagagtt ccaggctgtg
                                                                     4020
cetgeggeeg acceaggeee getteetetg gatteteete acceteeegg acacaaggag
                                                                     4080
caaacgggcc tcattccttt ttctccccac atccatcgct tcttgcaaaa ggaaagaaca
                                                                     4140
gaacaggaaa tgcattcgcc agagtgctcc ctgggtggac gagaggaaac agcgagtatg
                                                                     4200
getteacece gecaececeg eccetgeagt ttetgggeag ggeceagggg eccaggece
                                                                     4260
gctgctgctg gccttacgtt gcagagggag tgtgtccggt gtcgagggga gttgatgtcg
                                                                    -4320
ctcggtgtgg acgaccggtc gccttcggcg gcagatgcgt cggagatgac agagggctgc
                                                                     4380
cgggagtggc aggggtcac cctgaccgct tgccggtccg cagggtgagg ggggtgtgag
                                                                     4440
tggtagagag tetgttgaet etgeeggatg getgeggtea gegggaggte egeetgeaee
                                                                     4500
acceactect ggttgccatt gagcaccgte tegeceggea tggcgaggga atgccgettg
                                                                     4560
gggacgtect tggtcagegt agctaaggac tgtttggeca tggccagete ggcctccage
                                                                     4620
tectteatee ggttgteett gaggteeage tgggagegea gtgeegtgge gtggtetgtg
```

```
geotecttgg cttggegeeg cageteceae tteteaeget ccageaggte etteteettg
                                                                     4740
gecagegett tgacegeate etegetetee ttgeggtget geteatagtt geggatgaag
                                                                     4800
teteggaget geteetegeg getetecagt gtggeataca getgetgeat etggeteace
                                                                     4860
aggicitate telegecett taagegette egateagett teatggeetg caaggettet
                                                                     4920
                                                                     4980
ttggctctgg ctagctcctg ctccttctgg gccagctgga ccctgagctc ggtggccgag
aggaceteag aggacetege geeetgegae teeteeaggt cettegeeaa cateteette
                                                                     5040
atetgeegga gaaggtgaac tteeteetgg ageeggaca ettetteeeg caggageact
                                                                     5100
tgegetecaa getgggggtt etecatgtte gtegeegeeg agteeecege egeegaggeg
                                                                     5160
ctggccgcgg ctcccgggcc cgggccgggg ccgccgccgc cgctcagttc cgccagtctc
                                                                     5220
eggttggtgg cegtgagtte ggetegeagg ttggteacet cetggetgge egactggace
                                                                     5280
geceeatega tgeggagege gagetgetta ttgtetteea teatgeteag gattttggee
                                                                     5340
tgggggcgag agaggtgaca aagagctgca tgatgcgcgg ggggcgcgcg gccgggcacc
                                                                     5400
cceggeteta cetgttgtgt cetcegegge ceggettege eegegeeeeg acceeeagge
                                                                     5460
accggcagcg ccggttcctc cggcacagga atgacagcgg cgcctccagc cctagccgcg
                                                                     5520
gcggtggcga ggcggcgggg ggaggaggcg gaggagaaaa aagaggagga gaaggaggag
                                                                     5580
gaggagcagc gatcgccgag accccggcgg gcgggcgc
                                                                     5618
```

```
<210> 5107
<211> 2291
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (308)...(1609)
<223> similar to gi3043632 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5107
cccacgcgtc cgataaaaaa tgtttgtcat ctactattca agacaatcat tatttttctg
                                                                       60
gaaattgtat ctgttttcaa ggttatatgt aaagtgttaa gacaatatcc tataaaatgc
                                                                      120
attittagga agittitgcat tactititit ctaagictitg giaaagitat ataattagta
                                                                      180
ccttgaaaaa aataaagtga aaagcctttt ggggacttta gactttagtg tttaaatgta
                                                                      240
attattttta tttgtttttg gtttattttt tatttttatt ttttttggcc gtggttataa
                                                                      300
tetteageat etgeaagaag gaegaaaage teaacaatat ettgaeatgt getggaaaca
                                                                      360
gatggataat agtaaaaaga agtttgaaag agaatgtaga gaggcagaaa aggcacaaca
                                                                      420
gagttatgaa agattggata atgatactaa tgcaaccaag gcagatgttg aaaaggccaa
                                                                      480
acagcagttg aatctgcgta cgcatatggc cgatgaaaat aaaaatgaat atgctgcaca
                                                                      540
attacaaaac tttaatggag aacaacataa acatttttat gtagtgattc ctcagattta
                                                                      600
caagcaacta caagaaatgg acgaacgaag gactattaaa ctcagtgagt gttacagagg
                                                                      660
atttgctgac tcagaacgca aagttattcc catcatttca aaatgtttgg aaggaatgat
                                                                      720
tettgeagea aaateagttg atgaaagaag agaeteteaa atggtggtag aeteetteaa
                                                                      780
atctggtttt gaacctccag gagactttcc atttgaagat tacagtcaac atatatatag
                                                                      840
aaccatttet gatgggacta teagtgeate caaacaggag agtgggaaga tggatgecaa
                                                                      900
aaccacagta ggaaaggcca agggcaaatt gtggctcttt ggaaagaagc caaagggccc
                                                                      960
agcactagaa gatttcagtc atctgccacc agaacagaga cgtaaaaaac tacagcagcg
                                                                     1020
cattgatgaa cttaacagag aactacagaa agaatcagac caaaaagatg cactcaacaa
                                                                     1080
aatgaaagat gtatatgaga agaatccaca aatgggggat ccagggagtt tgcagcctaa
                                                                     1140
attagcagag accatgaata acattgaccg cctacgaatg gaaatccata agaatgaggc
                                                                     1200
ttggctetet gaagtegaag geaaaacagg tgggagagga gacagaagae atagcagtga
                                                                     1260
```

```
cataaatcat cttgtaacac agggacgaga aagtcctgag ggaagttaca ctgatgatgc
aaaccaggaa gtccgtgggc caccccagca gcatggtcac cacaatgagt ttgatgatga
                                                                     1380
atttgaggat gatgatecet tgeetgetat tggacaetge aaagetatet accettttga
                                                                     1440
                                                                     1500
tqqacataat gaagqtactc tagcaatgaa agaaggtgaa qttctctaca ttatagagga
ggacaaaggt gacggatgga caagagctcg gagacagaac ggtgaagaag gctacgttcc
                                                                     1560
cacgicatac atagaigtaa cictagagaa aaacagiaaa ggitccigaa gagggittci
                                                                     1620
gaggaaatgg gcaagatgtt gaaggaggtt acatgcagct gcttttgggg gagggtatta
                                                                     1680
gagttgtcag gctcaaagag agtgagagaa gcaagttgca tgagtgcatg cagacatgat
                                                                     1740
ttttttttta ctaacttcat tagcatttcc atacattgtt tttaaaaatc ataataccaa
                                                                     1800
cccttaagtt cctagttcac agttattccc acaaaagaaa aagccaacaa tagtgtacca
                                                                     1860
tttttctatt ttattttatt gctgtctaat caataaagaa tgcagagctg tcaaaaaaatg
                                                                     1920
tgtcttacat ttagctgtcc caacagggat tgtcttccct cccagctctg gttttaattg
                                                                     1980
gettttagad ceactatetg teagateett gedatetgte aqtqtetqee tqcqceacet
                                                                     2040
ccgtgcttgc ctaacatcct gttgcatgtc tagcgtgatt gagctagatt tttcaggcat
                                                                     2100
gtetttagat tecettgite tigteaaage citgittigt tittacatitg tagigeaaat
                                                                     2160
cactttgtca aacatctcca gcactaatgt ttccatctta gtatttgtgc acactgctat
                                                                     2220
aacttcccca ctgcaaacat tccagttttg gcattacgaa gaagtagctg tgaacctgaa
                                                                     2280
gtatttatga t
                                                                     2291
```

```
<210> 5108
<211> 613
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (616)...(321)
<223> similar to gi4008577 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5108
tttttttaaa aaaataaata catgtttatt taaaaaagaa aaagaaaaac cctaccaaga
                                                                       60
acaaaccetg gtcaatgaga aatcaatget teetetgaaa gecageaaca geeggtgetg
                                                                      120
tcaacacccc aagaagtaca ggtacctcag tccaaacatc aggtctcgaa tattcttctg
                                                                      180
tggtcaaaac tggcattcaa caggttgctg gtctgtgtgg gctccaatta ttagcacaqa
                                                                      240
caactightac cactiggatat chegetigech atgeceacha ceacageeca gecaceecea
                                                                      300
cagecteagg aaagttacat atecteaaca etecattigt aggeaagtte etecaetgee
                                                                    √ 360
ttettgetgg caageetgge aaagegette tgttcaaate cattggatet gtecaeteeg
                                                                      420
teccagegat atecaggeea gatattaaat etgttgggag gaggtgetgg accaetgtag
                                                                      480
egaggtetea ettitttatt ettgitetee tiggeettat tettetigat gaagtiggee
                                                                      540
atagggteec cetetette etgttetett ageateetat ecagatette gteateaata
                                                                      600
tagcgggcca gag
                                                                      613
```

```
<210> 5109
<211> 2423
<212> DNA
```

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2424)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2173)...(1415)
<223> similar to gi4235226 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5109

```
tttttttttt ttgagagaat tcataaatat tagttaagga tctaaaacaa acttctcaaa
                                                                       60
taactgaaag ctgaaagcct ctggaagcca actgtccctg cacaaaggtt tacaattgag
                                                                      120
aaatatetee titteetatt tigicaagit teittaatig etgaacagaa agaagettea
                                                                      180
agtaatggag aaggcattgt ctgagtgcag ctgctttcct gggacgcctg tgccgttcct
                                                                      240
gtettecaaa teetatgett gggaggeeee tgggaggtae atttttgeea gggaaceaae
                                                                      300
ctgaccttaa aaagatgagt gtgacacagc cggctgggca ggaggatgga ggttgccaca
                                                                      360
gggacaccac etggeccacg ceetgggnea geetgggeat gttttgeega gttegggga
                                                                      420
gggccacccc acccagaggg cacagggcaa accctaagca cgggggtatt gcccttgaag
                                                                      480
ecceagggga tgeectgtge eggateetea tgeeteattg actageetge ttgetgaagg
                                                                      540.
agcccagggg cetgageetg caacactgca aggggtgaga agggcatget getgtgggeg
                                                                      600
                                                                      660
cactggacte aaaceteaca ttagaageta caaagaacee caaatgeget teagageece
accaaccccc aagccagget catecetgae acagtgaate caetgcagee ecegtgggaa
                                                                      720
actotytyce aattyactyc ttaaagaact gygggaaata gaaagccgag aaagagctcc
                                                                      780
                                                                      840
gatacacaag ggaaaccgca cgtgagaacc agcactccca gcagggagac gtcactctcc
agaggecaca gagatggeag acacetetgt etecacaatg accecacate enaactgaaa
                                                                      900
gtgtgcagga agacaggtct attgacactg aaatctagaa atcaaggtcc acaggcgaat
                                                                      960
ggaggcatet teagecetga ggaggeeagg etgtgtetee tgaegeeeet gagggtggge
                                                                     1020
acagcageca getetgtgtg ggeggagtee acgtggteet cattetette cetggggaca
                                                                     1080
gggcagcaca gtcagatgct gagactgagg ccacacacat gggggcgcct tcctgccttg
                                                                     1140
geceggeeca getgeetetg gagecaggag geegtggeag ceacaceaea gtgtggatee
                                                                     1200
agacacgatt ctgtggaggg gttccgggat tccagacaga ctgaatctcc atggaatgat
                                                                     1260
gaaaattaaa atttacttga ttatggaagt etetgattta ttecageeaa aatattagat.
                                                                     1320
gagecaetga gaateaceae aaageaateg eesteaegge eettgeeagg gtgaeggeae
                                                                     1380
agcaggagga caggtgccca ggccagtggt tctagctctt cacctctgcg acctccttct
                                                                     1440
etgeettete titiggeette teetteteet eeacettete etetititee agtgitgeta
                                                                     1500
caatctcage cacctggctg gtggagatgt gaacatcttc tttgtccacc agctcaatca
                                                                     1560
cettgacgag gtcgtcgatg ttgacettgc catecttgtt ttcatccagt gctgcgcca
                                                                     1620
ggctggtgag cttgctttcg ggaatgtgct tgacttgctt catggcgttg atgagctcag
                                                                     1680
egacactgat gaegttetee eeegtgggea tgeegttgge eggggeeage ttgeeageet
                                                                     1740
getggtecat etccagetge gagateaage categatetg eccgateatt tgetgeacee
                                                                     1800
tttttgtcaa tetettgetg getttägatt ettecaegta tttttettea ecagtetttg:
                                                                     1860
aaagtteett ettgatetee tgeaagteet egetgtagte etgeaeatee teetteagea
                                                                     1920
getceagete etecttetee tiggigagig actiettetg etectgeage tiagageagg
                                                                     1980
categorgag gargregatt tecteetreg tgaretetre etectreaag eeetecagea
                                                                     2040
ceggggeagt gteetteaag gtetetgaet geaggaetgt gteaggeatt tetggetgtg
                                                                     2100
gctcggtccc cggcctttgg ggagcagcta ccacacgttc gggctcaaaa tccttctgaa
                                                                     2160
aggcaaggcg acaccagccc agcgcccgcc atcacacaga agcagtcttc ttgctccccg
                                                                     2220
                                                                     2280
aageteagaa eatatggeag aggeeaeaet gggageagge etgeaggtga eattgggeag
cacacetgee acagaaggte cetagggagg etceatgeag etgecaggte acetggggee
                                                                     2340
etetecagaa caggetagag cacettatee atetetggte teeccaagae teecccaage
                                                                     2400
```

```
<210> 5110
<211> 2266
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(884)
<223> similar to gi5813803 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5110 atggagtate eegegeegge caeggtgeag geegeggaeg geggagegge egggeettae 60 agcagetegg agttgetgga gggecaggag ceggaegggg tgegetttga cegegagagg 120 gegegeegee tgtgggaage egtgteeggt geceageegg tgggtagaga ggaagtggag 180 cacatgatec agaagaacca atgtetette accaacacce agtgtaaggt ttgetgegee 240 ttgcttattt ctgagtccca gaagctggca cattaccaga gcaaaaaaca tgccaacaaa 300 gtgaagagat acctagcaat ccatggaatg gagacattaa agggggaaac gaagaagcta 360 420 gacteagate agaagageag cagaageaaa gacaagaace agtgetgeee catetgtaac atgacetttt ceteceetgt egtggeeeag tegeactace tgggggaagae ceaegeaaag 480 aacttaaagc tgaagcagca gtccactaag gtggaagcct tgcaccagaa tagagagatg 540 atagacccag acaagttetg cagectetge catgeaactt teaacgacce tgteatgget 600 caacaacatt atgtgggcaa gaaacacaga aaacaggaga ccaagctcaa actaatggca 660 cgctatgggc ggctggcgga ccctgctgtc actgactttc cagctggaaa gggctacccc 720 tgcaaaacat gtaagatagt gctgaactcc atagaacagt accaagctca tgtcagcggc 780 ttcaaacaca agaaccagtc accaaaaaca gtggcatcat ccctgggcca gattccaatg 840 caaaggcaac ccattcagaa agactcaacc accttggaag actagaggtg attctgccca 900 960 geateceata ttgggeeage catgageeag etteeegtga etgeteagee ettggeteee tettgetegt tgtteteace aggaaagtae aegggeetga ggeaggattg ggeeacagae 1020 agecteteat tggteeggge taatteacte etgetgetee eetttggeag gggteetgta 1080 ggtcatgaca ggggaggcaa gggtattgag agactcgggg tctcgcgggg tggtagtttg 1140 gagggtgget ttecceattt eccaaeceet etgggeetta ggtgetgagg eccetgeeae 1200 etgtetttee tetaaaggte agttttggge eagttettge aactaaagag eagagatete 1260 tetgggeeet agacatttee agcaaaacet ggaactttea tgecaaacet ggggeaggge 1320 aggaaacaga ggaaatggct gcaacatggg agcttggagc taatacgaca ctctgccttc 1380 ccccagaagg tgcaggcttt cctgagtctt agaccagata tggccagttg cgcaggtttc 1440 tgccaactgt gaagtateet eetggageag tgacacaate ttggeggage attgetaeee 1500 cegetgeece etceacagtt cetgaatggt getaaggate tgeageagtt ggeaacgage 1560 tggggctggg ggcggcctcc atgtccactg agatcatagg acactccaat ggggatggga 1620 cetttecect cetecateag aggtgetetg accetaggtt acaegggaaa gtgeeceaca 1680 tgcaagtete cetgagggtt etgecectaa aggeagactg ceteatgeee getagetgtg 1,740 aggtteattg ctaccetegg cectactage cetetettee ceettgtgea geggaecaet 1800 tgcccagttt gctgtggtgc tagccttccc catcatccac cgggtgattt ctgggtccca 1860 gggaaagaaa gagagagctg atgcaggttt ctacagtgag gaacaggcgt ttcccaggcc 1920 ccacacccag atttctctat ctttgctgtg ttttatggcc tgggactgag tccacacgga 1980 tagatttttc cttgtaacct tgagacgaga attccaagga gtgtcaccat cagaggettc 2040 tetteattgt gteaaagaag eccetagetg etetegtgge eteetteece cactecetat 2100 ecetteacet gtgaaatgee tttgetttge atattgtgtg tggatgtgtg tgtgtgtgtg 2160

```
<210> 5111
<211> 1041
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (122)...(539)
<223> similar to gi2832266 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

# <400> 5111 cactaacctg cccctactgc tggagctgcc cacacggtgg tccccgacct tgggcccaga 60 ccggcacggg gctccggaaa aactgcttgg ggctgagcgg atgccccgag ccccqqqcqq 120 ctttgagtgc ttccactgcc acaaacccta ccacacgctg gccgggctgg ccaggcaccg 180 geagetgeae tgecaectge agggggggeg tgtetteaee tgeaagtaet gegaeaagga 240 gtacaccage etgggtgeec teaagatgea cateegeact cacaegetge cetgeacetg 300 caagatetgt ggcaaggeet tetecaggee etggttactg cagggeeatg tecgcaceca 360 cacaggggag aagccctatg cetgetegea etgeageagg geetttgeeg acegeteeaa 420 cettegggee catetgeaaa egeacteaga egecaagaag taceggtgee ggegetgeae 480 caagacette teeegeatgt eesteetgge geggeatgag gagtetgget getgeeeggg 540 cccctgagag gcacgtggtc ggcgcaggta ggagggatgg tcctcaccgg gagagctggc 600 gteceteetg ecceeagagg agecaggagt etgggaggge ggggeetgge eteacaettg 660 gtgcgtcctc cacatctgcg tccaatcaga accaaagaag tccagcgggg gccactgggc 720 eggaggacae tecceeagge ateceacege geggageeea eteagaggag acteetetee 780 eggggaagge titeateaga acaagageea tggtteeatt tegacaegge caggteteeg 840 gggctaccct tccaagagtc agagcctcgg ggaggtggcc gccagcatgg gccggcactg 900 ccgccggatg gctggcaagg ctgcctagtt cccttgcagc agaaatgaac agttctgact 960 tatagtgage aeggeeetgt ggeeetteet eagtaggeae aactacetet eageeageee 1020 ccgccagcct ttggtttggg g-1041

```
<210> 5112
<211> 1698
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1699)
<223> n = a,t,c or q
<220>
<221> misc feature
```

<222> (1)...(1090) <223> similar to gi2589009 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5112
taccctccaa atagcaaatg tacttggaaa atcacagttc ccgaaggaaa agtagtcgtt
                                                                       60
ctcaatttcc gattcataga cctcgagagt gacaacctgt gccgctatga ctttgtggat
                                                                      120
gtgtacaatg gccatgccaa tggccagcgc attggccgct tctgtggcac tttccggcct
                                                                      180
ggagcccttg tgtccagtgg caacaagatg atggtgcaga tgatttctga tgccaacaca
                                                                      240
gctggcaatg gcttcatggc catgttctcc gctgctgaac caaacgaaag aggggatcag
                                                                      300
tattgtggag gactccttga cagaccttcc ggctctttta aaacccccaa ctggccagac
                                                                      360
egggattace etgeaggagt caettgtgtg tggeacattg tageeceaaa gaateagett
                                                                      420
atagaattaa agtttgagaa gtttgatgtg gagcgagata actactgccg atatgattat
                                                                      480
gtggctgtgt ttaatggcgg ggaagtcaac gatgctagaa gaattggaaa qtattggtgt
                                                                      540
gatagtecae etgegeeaat tgtgtetgag agaaatgaae ttettattea gtttttatea
                                                                      600
gacttaagtt taactgcaga tgggtttatt ggtcactaca tattcaggcc aaaaaaactg
                                                                      660
cctacaacta cagaacagcc tgtcaccacc acattccctg taaccacggg tttaaaaccc
                                                                      720
accgtggcct tgtgtcaaca aaagtgtaga cggacgggga ctctggaggg caattattgt
                                                                      780
tcaagtgact ttgtattagc cggcactgtt atcacaacca tcactcgcga tgggagtttg
                                                                      840
cacgccacag totogatcat caacatotac aaagagggaa atttggcgat tcaqcaqqcq
                                                                      900
ggcaagaaca tgagtgccag gctgactgtc gtctgcaagc agtgccctct cctcaqaaqa
                                                                      960
ggtctaaatt acattattat gggccaagta ggtgaagatg ggcgaggcaa aatcatgcca
                                                                     1020
aacagettta teatgatgtt caagaccaag aatcagaage teetggatge ettaaaaaat
                                                                     1080
aagcaatgtt aacagtgaac tgtgtccatt taagctgtat tctgccattg cctttgaaag
atctatgttc tctcagtaga aaaaaaaata cttataaaat tacatattct gaaagaggat
                                                                     1200
tccgaaagat gggactggtt gactcttcac atgatggagg tatgaggcct ccgagatagc
                                                                     1260
tgagggaagt tetttgeetg etgteagagg ageagetate tgattggaaa eetgeegaet
                                                                     1320
tagtgcggtg ataggaagct aaaagtgtca agcgttgaca gcttggaagc gtttatttat
                                                                     1380
acatetetgt aaaaggatat tttagaattg agttgtgtga agatgteaaa aaaagatttt
                                                                     1440
agaagtgcaa tatttatagt gttatttgtt tcaccttcaa gcctttgccc tgaggtgtta
                                                                     1500
caatcttgtc ttgcgttttc taaatcaatg cttaataaaa tatttttaaa ggnnnnnnnn
                                                                     1560
nnnnnnnnn nnngggggg ccgttttaaa gaatccttgg gggggccaaa gtttacgcgg
                                                                     1620
gettgeaacg gaatagtttt tteettatag ggggeggtat tataacetae etgggaattt
                                                                     1680
ttggaaagga cctttact
                                                                     1698
```

```
<211> 2185
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2011)...(1170)
<223> similar to gi1572802 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<210> 5113

```
60
ttttttttt ttgagtttcc aaaattagaa tttatttcag tttctaagga atgaatcccc
gagtgtggca ggaaggacac agccggctcc tgacgcacac ctgatttgat tcaacaccga
                                                                    120
gteggcacag acacaaccag agatggcetg ggtecagget ggggetgcac gggetgtgte
                                                                    180
ctggacagcc aggagggagg ccccgcacac agacggccgc cgggcagggg gcctgagcgg
                                                                    240
                                                                    300
gacaggeetg gecacageee atgteetigg cettecacat aggtgeacac attgtetgee
cagagagggc caagatgccc caggcacccc ttcgctccgg gggctcagga cacaggctcc
                                                                    360
cagctgaggc cacgcctgga cccagagctg atgtttggct gcacgcgagc ccactcggga
                                                                    420
cagacccaag aacacgaatt ctgtcccttt ggatttaagg ctggtgtttt ttgacattta
                                                                    480
cttcagtttt tctctctgaa attaaaatta cctgagtaaa agattttaag acattaaaaa
                                                                    540
agccaaaaac acagaatccc tgcaggcaga cggtgccagg gaggtggcgg ccagggccag
                                                                    600
gatgccaggg gcacggtggg gtcggctgga gctccagggc tgggcctttc ccagtctcgc
                                                                    660
ctgccctgga gcccccagga gccgcccctg ggccgacgct cctgtggccg gagcacagga
                                                                    720
                                                                    780
aggcacagtg aggtagggac agtggccatt gtcccccgcc tgccaccagg gctgagaggg
cagogoacgo ctoggococt cotataagoo cotgococot oggagetggg tgtottgtoo
                                                                    840.
900
cagacagtta aataatcctt tatttgggtg ggctggggga ggggtgactg gcccaggagg \
                                                                    960
geaggegagg cegggeeeag acceecatgg ggggtggeag gggeeteggg egggetagga
                                                                   1020
tgcacctggc acccagaagt gccgcggggg cactggctcc tcaggggccc gagcgggcgg
                                                                   1080
ggagcagtet cetacttgtg cegggeeteg gteacectet geaggeagta etgegeggeg
                                                                   1140
ggcagcgaca ggaccaggct cgcggtgcgg cggcccatcc agtacaggct gtagcccagc
                                                                   1200
aggeegaaga aggeggeett caeggeeaac egagaeacte tgeeggagae ggaeggeggg
                                                                   1260
ggcacggtca tgatctcctg gatgttgagg teggtgetce agttettete gatgecagge
                                                                   1320
acgtggccca tgcccacgac gcccacgacc acggagggga cgcacttcct gggctcggcg
                                                                   1380
teagaggece gaggeagete gaggegeege geggeetgge geageatgta ggttaggtag
                                                                   1440
acgtcgcgct ccgagacgat ggtgcggtgc aggtctggga actcgccaat catctcggcc
                                                                   1500
atcatctgct ccagtaggtc cttctgcttg cagegttcca cgtcatcctt gctgatgggg
                                                                   1560
tetgacagga ageacaggee ecaageeage etgacettet gecagaagga gagegetgeg .
                                                                   1620
atggccctct tgaaggtgac ggggatgggt cggtcaccca ggtggaactt gcagaaaggc
                                                                   1680
acettgetgg ceteettgaa ggeeteeetg aactegeeae etggggeeat geeeagetge
                                                                   1740
teggtgatgt gtgcagacac etteageage ageatetgea teageeeega catgageeeg
                                                                   1800
ttetgeetea eggeetgetg eagettetee aggetgaget eetgggeete eegeageage
                                                                   1860
gtgctctcgt ccatcttcag catggacaca cgatattggc agagctccac gaccaccacg
                                                                   1920
teaggetgea ceteceggat ggtetteaca aegtecetet tgetgtegte getgaagtgg
                                                                   1980
getgteecca ceaegtacae cetgeteeeg teeteageea ceaaetgggt cacagtgege
                                                                   2040
ggcaggttgg gccgctgacg ccgccgcttc agcttcatct ccaggagcag gttgaaggcg
                                                                   2100
tecaegtegg acaggitetg ggggieteca gaaagcaeee igggeaeegg eteigaagee
                                                                   2160
acgaaatcgt cgacccggga attcc
                                                                   2185
```

```
<210> 5114
<211> 411
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(315)
<223> similar to gi5103027 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
ccccggccac ctaccacca ctccactca acctccaage ccacctggge cagettteec 60 cgctcctga gcacctgge ttcgacgcc tggatcaact gagccaggtg gaactcctgg 120 gggacatgga tcgcaatgaa ttcgaccagt atttgaacac tcctggccac ccagactccg 180 ccacagggge catggccctc agtgggcatg ttccggtctc ccaggtgaca ccaacgggtc catgactcate tccgtcctgg ctgatgccac ggccacgtac tacaacagct 300 acagtgtgtc atagagctgg aggcgcccg tccggtcage cctcgcgcc tctccttcct 360 gtgccttgag tggcagagga gccgtccage cacaccagct ttcctccac c 411
```

```
<210> 5115
<211> 2065
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (685)...(959)
<223> similar to gi3875176 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5115 cggacgcgtg ggctcgcgta gccgtgcgcc gattgcctct cggcctgggc aatggtcccg 60 gctgccggtc gacgaccgcc ccgcgtcatg cggctcctcg gctggtggca agtattgctg 120 tgggtgctgg gacttcccgt ccgcggcgtg gaggttgcag aggaaagtgg tcgcttatgg 180 teagaggage agectgetea eceteteeag gtgggggetg tgtacetggg tgaggaggag 240 ctcctgcatg acccgatggg ccaggacagg gcagcagaag aggccaatgc ggtgctgggg 300 ctggacaccc aaggcgatca catggtgatg ctgtctgtga ttcctgggga agctgaggac 360 aaagtgagtt cagagcctag cggcgtcacc tgtggtgctg gaggagcgga ggactcaagg 420 tgcaacgtcc gagagagcct tttctctctg gatggcgctg gagcacactt ccctgacaga 480 gaagaggagt attacacaga gecagaagtg geggaatetg aegeageeee gacagaggae 540 tccaataaca ctgaaagtct gaaatcccca aaggtgaact gtgaggagag aaacattaca 600 ggattagaaa atttcactct gaaaatttta aatatgtcac aggaccttat ggattttctg 660 aacccaaacg gtagtgactg tactctagtc ctgttttaca ccccgtggtg ccgcttttct 720 gccagtttgg cccctcactt taactctctg ccccgggcat ttccagctct tcactttttg 7.80 gcactggatg catctcagca cagcagcctt tctaccaggt ttggcaccgt agctgttcct 840 aatattttat tatttcaagg agctaaacca atggccagat ttaatcatac agatcgaaca 900 ctggaaacac tgaaaatctt catttttaat cagacaggta tagaagccaa gaagaatgtg 960 gtggtaactc aagccgacca aataggccct cttcccagca ctttgataaa aagtgtggac 1020 tggttgcttg tattttcctt attctttta attagtttta ttatgtatgc taccattcga 1080 actgagagta ttcggtggct aattccagga caagagcagg aacatgtgga gtagtgatgg 1140 totgaaagaa gttggaaaga ggaacttcaa toottogttt cagaaattag tgotacagtt 1200 tcatacattt tctccagtga cgtgttgact tgaaacttca ggcagattaa aagaatcatt 1260 tgttgaacaa ctgaatgtat aaaaaaatta taaactggtg ttttaactag tattgcaata 1320 agcaaatgca aaaatattca atagatgcac tattcttgtt tttactgcat gaacgtaatc 1380 cagtatttgg aaagtaatcc agtttgaaat gtgaagatgt attccggcag aatagtgagt 1440 agaatgacat gcttactata cagaaggcaa aaataggact ctcaggtaat agtttaagga 1500 aaccettgat teettatata tgtttaagaa ggttagtttt etgtttettt geagttttte 1560 ttctagagtc catagcagga aagtatgtaa ccagaattgg ttagtgtgac cccctcaagt 1620 agcaagtgat ggaaaataag agtcaaatac cttgatgttt gtgatctcta actcaaaaaa 1680 tttgaagtgt tttaagttgt ttctgggtaa gggagatgtt aggagaaagg aaatgctgta 1740 actaaagctc aattattatc agttctatgc taacgtatac attttaatca tagttaccta 1800

```
agcagcatge attaattgaa eettaaaatg tteeeactge geetggeeta aacaaacttt 1860 ttgaaaaget gtttetaaa gatteettaa atteagatat gacagetaat taceteatea 1920 taaattaett ttatactaat tgttteeagg gttttagagt agttgaatgt ttattteaca 1980 aggeaceeta aattetatag aaataaaace teagatgagt eteettetta gagtgttaca 2040 atgaatggga gtttacaett ttatg
```

```
<210> 5116
<211> 2276
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (271)...(492)
<223> similar to gi3877645 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5116 gaagagtgtg cgccaggggg ctgcctgatg gagctatgca tccagctcag catcgtcatg 60 ctggggaaac agctgatcca gaacaacctg ttcgagatcg gcatcccgaa gatgaagaag 120 ctcatccgct acctgaagct gaagcagcag agcccccctg accactagga gtgtgtgaag 180 aggaaacage ggtacgaggt ggattacaac etggageeet tegegggeet caceceagag 240 tacatggaga tgatcatcca gtttggcttc gtcaccctgt ttgtcgcctc cttccccctg 300 geoceactgt ttgegetget gaacaacate ategagatee geetggacge caaaaagttt 360 gtcactgagc tccgaaggcc ggtagctgtc agagccaaag acatcggaat ctggtacaat 420 atcctcagag gcattgggaa gcttgctgtc atcatcaatg ccttcgtgat ctccttcacg 480 tetgaettea teeegegeet ggtgtaeete tacatgtaca gtaagaacgg gaccatgcae 540 gggttcgcaa ccacaccete tecteettea aegteagtga ettecagaae ggeaeggeee 600 ccaatgaccc cctggacctg ggctacgagg cgcagatctg cagggtataa agactaccga 660 gageegeega ggeeggaaaa caagtaegae ateteeaagg aettetggge egteetgtge 720 atcoggotgg cagttgtgat ogtottocag aacotggtoa tgttoatgag ogactttgtg 780 gactgggtca tcccggacat ccccaaggac atcagccagc agatccacaa ggagaaggtg 840 ctcatggtgg agctgttcat gcgggaggag caagacaagc agcagctgct ggaaacctgg 900 atggagaagg agcggcagaa ggacgagccg ccgtgcaacc accacaacac caaagcctgc 960 ccagacagee teggéageee ageceecage catgeetace aegggggegt detgtageta 1020 tgccagcggg gctgggcagg ccagccgggc atcctgaccg atgggcaccc tctcccaggg 1080 caggoggett cocgetocca coagggooog gtgggtootg ggttttotgo aaacatggag 1140 gaccactttc tgataggaca ttttcctttc ttctttctgt tttctttccc ttgtttttgc 1200 acaaagccat tatgcaggga atatttttta atctgtagta ttcaagatga atcaaaatga 1260 tggctggtaa tacggcaata aggtagcaaa ggcaggtgct ttgcagaaag aatgcttgga 1320 aacttgagte teectagagg tgaaaagtga geagaggeee etagaaaeee teetetgaat 1380 cctcctaatt ccttaagata gatgcaaaat ggtaagccga ggcatcgcgc aaaagctggt 1440 gcgatgcttc agggaaaatg gaaaacccac gcaagaataa tgattgattc cggttccaaa 1500 aggigicace taccigitte agaaaagtta gactitecat egectities ticcateagt 1560 tgagtggctg agagagaagt gcctcatccc tgagccacac agggggcgtg ggagcatccc 1620 agttatecet ggaaagetag aaggggacag aggtgteeet gattaageag gaaacageae 1680 ccttggcgtc cccagcaggc tccccactgt cagccacaca cctgccccca tcacaccaag 1740 ccgacctcag agttgttcat cttccttatg ggacaaaacc ggttgaccag aaaatgggca 1800 gagagagatg accteggaag catttecaca gatggtgtca gggtttcaag aagtettatg 1860 gcttccaggg gtcccctgga agctttagaa tatttatggg ttttttttt caaatatcaa 1920

```
ttatatggta gattgaggat ttttttctg tagctcaaag gtggagggag tttattagtt 1980 aaccaaatat cgttgagagg aatttaaaat actgttacta cccaaagatt tttattaata 2040 aaggcttata ttttggtaac acttctctat atttttactc acaggaatgt cactgttgga 2100 caattattt aaaagtgtat aaaaccaagt ctcataaatg atatgagtga tctaaatttg 2160 cagcaatgat actaaacaac tctctgaaat ttctcaagca ccaaggaaa catcattta 2220 gcaaaggcca ggaggaaaaa tagaaataaa tttgtcttga agatctcaaa aaaaaa 2276
```

```
<210> 5117
<211> 1547
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1489)...(974)
<223> similar to gi2842518 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5117 ttttttttt tggattttt tgtgctttaa tgttcgcagt cacacgaaag tggcatctcc 60 atcagcactg gggcggccgg cctcctcatc agccgacage ttgcacggtc cccgcctctc 120 atccatttgg tetgtttgca agttactaga teatacaaaa ataacegeta caaattetet 180 gtatotggoa tataaaaact gagoaaaaag tatotottaa agoaaaacat otoagaaaaa 240 atacaacaca ggtttaactt ctgcagtact ttgttcatat aaaacactag taaaataggc 300 ttcttaaaaa ttaaatagtg aaataccaac caaattatat acattgttac agtacaagtg 360 aatgaggcaa aatatccagt tettagttte eeaggtgggg gggggtggee tteagtgegt 420 ggcacggagg gggtgacagg aaggccacgt teegatgtea cagtcagege agaaagagge 480 ttgcagcggg acaaacagat ggaaagaact gagtcacaca gggaagacca ggggctcctt 540 tgaggaagag tgaggtcatg tttttattgc ttgctaatcc gaggttttcc ctggcccgat 600 geceetetag gtageetgga teecaaatge tgeageecae gtagegetaa teeatgteae 660 caagcagcca cggggaagcc acagctgctc cagagaagac agaactaggc ttcagagccc 720 teaatatetg agetggaeeg ateetggtet tteaggteea teagggteee acatggteea 780 actgacacac acgtttcccc gctgacggcc acgttcacct gagagcctga gggcgggcag 840 tgtgggctca tggcactggg atggtatcac tgtggcctgg ggggtggcac tcagacccag 900 ccaacccct cagcgaccac agtgcctcgc ccgcttctct gccgccacca gggctgaggg 960 tetaegtgeg gegeegettg geageactgg gaetggaagg gttgetgttt geggteagga 1020 etttgteggt gacceggetg egetteeget tgtetgegee ttetttgeae eccaagtetg aggagttett etettigtet tigetggatt titetgatge titececaaa eteectgaag 1140 atgaaaaaac atcgtcagcc ccattgtggg ggtccacgtc ttccttcatc tcctcttca 1200 tetectette tateateact ttteettete ggaeeteetg aatgatetet tetggaagga 1260 cgaagtteet etetggatte gggaatggaa gaateteaga eteatgeage geetgeatgt 1320 cgtacatggt geteagatgg teedagatga cettggatgg gaeetgeege eegatgttet 1380 ggctgaactt gtcccgaata caaatcatgt ggaagtgtcg gttcacaccg acgggcttgt 1440 ggcccagcat ggcgtggaag aggcacacct ccacctcggg gctccacacc actgtctcct 1500 ccgccgggct ggtggccgcc tcccccgggc ccttgtcgct tgcggcg 1547

```
<210> 5118
<211> 863
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(864)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (10)...(654)
<221> misc_feature
<222> (10)...(654)
<221> misc_feature
<222> (10)...(654)
<223> similar to gi1825727 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5118 ctggaagaag agegggagtt ttataatgcc aggegaeggg ageategeea gaggaatgae 60 gttggtggtg gcggcagtga gtctcaggag ttggttcctc ggcctggtgg caacaacaaa 120 180 gaaaaagagg tgcccgctaa agaaaaacca agctttgaac tttctggggc acttcttgag gacaccaaca ctttccgggg tgtagtcatt aaatatagtg agcccccaga agcacgtatc 240 cccaaaaaac ggtggcgtct ctacccattt aaaaatgatg aggtgcttcc agtcatgtac 300 atacategae agagtgegta cetaetgggt egacacegee geattgeaga catteeaatt 360 420 gatcacccgt cttgttcaaa gcagcatgcg gtctttcaat atcggcttgt ggaatatacc cgtgctgatg gcacagttgg ccgaagagtg aagccctaca tcattgacct tggctcaggc 480 aatggaacct tcttaaacaa caaacgtatt gagccacaga gatactatga actaaaagaa 540 aaggatgtac tcaaatttgg attcagtagc agagaatacg tcttgctcca tgagtcgncg 600 gacacttctg aaatagacag gaaagatgac gaggatgagg aggaggagga agaagtgtct 660 gacagetage aaactaagaa cecaaactat tgatacaegg ttteettett ggaagtettt 720 gattgactca gagagcacta tggtggtggg tecagcacta tggtgctctc tgtaatgcct 780 cttactgcct taagtctttc ctctgttgct gaccagattg tgttaccatt tgaatacact 840 gactaatgta tgttaaactt tta 863

```
<210> 5119
<211> 930
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (12)...(204)
<223> similar to gi5107816 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5119
ggaatteeeg ggtegagggg gacegeettg gggggetgte cateageeca gegggeateg 60
tgaageggga tgagetggtg tteeggatgg teegtggeeg eegggtgeec ateettatgg 120
```

```
tgacctcagg cgggtaccag aagcgcacag cccgcatcat tgctgactcc atacttaatc
                                                                      180
tgtttggcct ggggctcatt gggcctgagt cacccagcgt ctccgcacag aactcagaca
                                                                      240
caccgetget tecceetgea gtgeeetgae cettgetgee etgeetgtea egtggeeetg
                                                                      300
                                                                      360
cctatccgcc ccttagtgct ttttgttttc taacctcatg gggtggtgga ggcagccttc
agtgagcatg gaggggcagg gccatccctg gctggggcct ggagctggcc cttcctctac
                                                                      420
ttttccctgc tggaagccag aagggcttga ggcctctatg ggtgggggca gaaggcagag
                                                                      480
cetgtgteee agggggaeee acaegaagte accageeeat aggteeaggg aggeaggeag
                                                                      540
ttaactgaga attggagagg acaggctagg tcccaggcac agcgagggcc ctgggcttgg
                                                                      600
ggtgttctgg ttttgagaac ggcagaccca ggtcggagtg aggaagcttc cacctccatc
                                                                      660
                                                                      720
ctgactagge etgeatecta actgggeete ecteeeteee ettggteatg ggatttgetg
coctettige eccagagetg aagagetata ggeaetggig tggatggeec aggaggiget
                                                                      780
ggagctaggt ctccaggtgg gcctggttcc caggcagcag gtgggaaccc tgggcctgga
                                                                      840
tgtgaggggc ggtcaggaag gggtacaggt gggttccctc atctggagtt cccctcaat
                                                                      900
aaagcaaggt ctggacctgc aaaaaaaaaa
                                                                      930
```

```
<210> 5120
<211> 2614
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(916)
<223> similar to gi3294180 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5120
ctgtgtggtt ttatgtaggc atggcaggtg cettttgttt catectcata caactagtet
                                                                       60
tacttattga ttttgcacat tcatggaatg aatcgtgggt tgaaaaaatg gaagaaggga
                                                                      120
actogagatg tiggtatgca goottgttat cagotacago totgaattat otgotgtott
                                                                      180
tagttgctat cgtcctgttc tttgtctact acactcatcc agccagttgt tcagaaaaca
                                                                      240
aggegtteat cagtgteaae atgeteetet gegttggtge ttetgtaatg tetataetge
                                                                      300
caaaaatcca agaatcacaa ccaagatctg gtttgttaca gtcttcagta attacagtct
                                                                      360
acacaatgta tttgacatgg tcagctatga ccaatgaacc agaaacaaat tgcaacccaa
                                                                      420
gtctactaag cataattggc tacaatacaa caagcactgt cccaaaggaa gggcagtcag
                                                                     480
tccagtggtg gcatgctcaa ggaattatag gactaattct ctttttgttg tgtgtatttt
                                                                      540
attecageat cegtaettea aacaatagte aggttaataa aetgaeteta acaagtgatg
                                                                      600
aatctacatt aatagaagat ggtggagcta gaagtgatgg atcactggag gatggggacg
                                                                      660
atgttcaccg agctgtagat aatgaaaggg atggtgtcac ttacagttat tecttettte
                                                                      720
actteatget ttteetgget teaetttata teatgatgae eettaeeaae tggtaeaggt
                                                                      780
atgaaccete tegtgagatg aaaagteagt ggacagetgt etgggtgaaa atetetteea
                                                                      840
gttggattgg catcgtgctg tatgtttgga cactcgtggc accacttgtt cttacaaate
                                                                      900
gtgattttga ctgagtgaga cttctagcat gaaagtccca ctttgattat tgcttatttg
                                                                      960
aaaacagtat tcccaacttt tgtaaagttg tgtatgtttt tgcttcccat gtaacttctc
                                                                     1020
cagtgttctg gcatgaatta gattttactg cttgtcattt tgttattttc ttaccaagtg
                                                                     1080
cattgatatg tgaagtagaa tgaattgcag aggaaagttt tatgaatatg gtgatgagtt
                                                                     1140
agtaaaagtg gccactattg ggcttattct ctgctctata gttgtgaaat gaagagtgaa
                                                                     1200
aacaaatttg tttgactatt ttaaaattat attagacctt aagctgtttt agcaagcatt
                                                                     1260
aaagcaaatg tatggctgcc ttttgaaata tttgatgtgt tgcctggcag gatactgcaa
                                                                     1320
agaacatggt ttattttaaa atttataaac aagtcactta aatgccagtt gtctgaaaaa
                                                                     1380
```

```
tettataagg ttttaccett gataeggaat ttacaeaggt agggagtgtt tagtggaeaa
                                                                     1440
tagtgtaggt tatggatgga ggtgtcggta ctaaattgaa taacgagtaa ataatcttac
                                                                     1500
                                                                     1560
ttgggtagag atggcctttg ccaacaaagt gaactgtttt ggttgtttta aactcatgaa
gtatgggttc agtggaaatg tttggaactc tgaaggattt agacaaggtt ttgaaaagga
                                                                     1620
                                                                     1680
taatcatggg ttagaaggaa gtgtttgaaa gtcactttga aagttagttt tgggccagca
cggtagetea ecettgtaat eccageaett tgggaggetg aggtgggtag attaettgag
                                                                     1740
cccaggaatt caagaccagc ctgggcaaca tggtgaaacc ctgtttctat aaaaaataat
                                                                     1800
                                                                     1860
ctgggctttg tagcatatgc ctgtggtccc agctactgag gaggctgagg tgggaggatt
                                                                     1920
gettgagece aggaggeaga ggttgeagtg agecaaggte aegteactge aetetageet
gggcaacaga gtaagacaaa aaaatatata tatattgaaa atcaaaggag gcaaaatttt
                                                                     1980
gacagggaag gaagtaactg caaaacacta ggctttagta ggtacttata taaaatctag
                                                                     2040
tccagttctc tcatttaaaa aaatgaagac actgaagtac agacttaaat agctcagata
                                                                     2100
                                                                     2160
gctaattagg aaatttcaag ttggccaata atagcattct ctctgacatt taaaaataat
ttctattcaa aatacatgca taattgattt tacacctcat tactggtgga taatttatgt
                                                                     2220
                                                                     2280
gatgtggatt gctggtgtcc agcatgaccc ataaacaggt cagaagaatg atggaatgtt
ttagaataaa ctcctgctta tagtatacta cacagttcaa aagatgttta aaatgctttt
                                                                     2340
gtatttactg ccatgtaatt gaaatatata gattattgta acctttcaac ctgaaaatca
                                                                     2400
agcagtatga gagtttagtt atttgtatgt gtcactagtg tctaatgaag cttttaaaat
                                                                     2460
ctacaatttc ttctttaaaa atatttatta atgtgaatgg aatataacaa ttcagcttaa
                                                                     2520
ttccccaacc ttattctgtg tgtagacatt gtattccaca attttgaatg gctgtgtttt
                                                                     2580
acctctaaat aaatgaattc agagaaaaaa aaaa
                                                                     2614
```

```
<210> 5121
<211> 2945
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2188)...(471)
<223> similar to gi1519392 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5121
ttttttttt ttcctgcctg aatcagggag acccaggatg ctgttcaggc cttatcccaa
                                                                       60
ccaaattgtg tacccaacag ctcattgaga acaagccatg atgacaatgg cggttttgtc
                                                                      120
aaatagaaaa gggggaaatg tggggaaaag caagagagat cagattgtta ctgtgtctgt
                                                                      180
gtagaaagaa gtagacatag gagactccat tttgttctgt actaagaaaa attcttctgc
                                                                      240
cttgagattc tgttaatcta taaccttacc cccaaccccg tgctctctga aacatgtgct
                                                                      300
gtgtcaactc agagttaaat ggattaaggg cggtgcaaga tgtgctttgt taaacagatg
                                                                      360
cttgaaggca gcatgctcct tgagagtcat caccactccc taatctcaag tacccaggga
                                                                      420
cacaaaaact gcggaaggcc gcagggacct ctgcctagga aagccaggta ttgtccaagg
                                                                      480
tttctcccca tgtgatagtc tgaaatatgg cctcgtggga agggaaagac ctgaccgtcc
                                                                      540
cccagcccga cacccgtaaa gggtctgtgc tgaggaggat tagtaaaaga ggaaggcatg
                                                                      600
cctcttgcag ttgagacaag aggaaggcat ctgtctcctg cccgtccctg ggcaatggaa
                                                                      660
tgtctcggta taaaacccga ttgattgtac gttccatcta ctgagatagg gaaaaaacgc
                                                                      720
ctatctcacc tatcaccgcc tatcaccact ccctaatctc aagtacccag ggacacaaac
                                                                      780
actgeggace acteectaat etcaagtace cagggacaca aacactgegg aaggeegcag
                                                                      840
ggtcctctgc ctaggaaaac caggtattgt ccaaggtttc tccccatgtg atagtctgaa
                                                                      900
atacageete gtgggaaggg aaagaeetga etgteeeeca geeegaeage egtaaagggt
                                                                      960
```

```
ctgtgctgag gaggattagt ataagaggaa ggcatgcctc ttgcagttga gacaagagga
                                                                     1020
                                                                     1080
aggeatetgt etectgeeeg teeetgggea atggaatgte teggtataaa accegattgt
gegttetate tactgagata gggaaaaace geettaggge tggaggtggg acatgtggge
                                                                     1140
agcaatactg ctttgtaaag cattgagatg tttacgtgta tgcatatcta aaagcacagc
                                                                     1200
acttaatect ttacettgte tatgatgeaa agacetttgt teaegtgttt gtetgetgae
                                                                     1260
cctctcccca caattgtctt gtgaccctga cacatccccc tctcggagaa acacccacga
                                                                     1320
atgatgaata aatactaagg gaactcagag gctggcggga tcctccatat gctgaacgct
                                                                     1380
ggttccccgg gtccccttat ttctttctct atactttgtc tctgtgtctt tttcttttcc
                                                                     1440
aaatctctcg tcccacctta cgagaaacac ccacaggtgt gtaggggcaa cccacccta
                                                                     1500
catctggtgc ccaacgtgga ggcttttctc tagggtgaag gtacgctcga gcgtggtcat
                                                                     1560
tgaggacaag tcgacgagag atcccgagta catctacagt cagccttacg acatttgaag
                                                                     1620
                                                                     1680
ttctacaatg aacccatcag agatgcaaag aaaagcacct ccgcggagac ggagacatcg
caatcgagca ccgttgactc acaagatgaa caaaatggtg acgtcagaag aacagatgaa
                                                                     1740
gttgccatcc accaagaagg cagagccgcc aacttgggca caactaaaga agctgacgca
                                                                     1800
                                                                     1860
gttagctaca aaatatctag agaacacaaa ggtgaaacaa accccagaga gtatgctgct
tgcagccttg atgattgtat caatggtgtc tgcaggtgta cccaacagct ccgaagagac
                                                                     1920
agcgaccatc gagaacgggc catgatgacg atggcggttt tgtcgaaaag aaaaggggga
                                                                     1980
aatgtgggga aaagcaagag agatcagatt gttactgtgt ctgtgtagaa agaagtagac
                                                                     2040
ataggagact ccattttgtt atgtactaag aaaaattctt ctgccttgag attctgtgac
                                                                     2100
cttaccccca accccgtgct ctctgaaaca tgtgctgtgt caactcagag ttgaatggat
                                                                     2160
                                                                     2220
taagggcggt gcaggatgtg ctttgttaaa cagatgcttg aaggcagcat gctccttaag
                                                                     2280
agteateace actecetaat eteaagtace eagggacaca aaaactgegg aaggeegeag
ggacctctgc ctaggaaagc caggtattgt ccaaggtttc tccccatgtg atagtctgaa
                                                                     2340
atatggcctc gtgggaaggg aaagacctga ccgtccccca gcccgacacc cgtaaagggt
                                                                     2400
ctgtgctgag gaggattagt aaaagaggaa ggaatgcctc ttgcagttga gacaagagga
                                                                     2460
aggeatetgt etectgeetg teeetgggea atggaatgte teggtataaa accegattgt
                                                                     2520
atgetecate taetgagata gggaaaaaee geettaggge tggaggtggg acetgeggge
                                                                     2580
agcaatactg ctttgtaaag cattgagatg tttatgtgta tgcatatcta aaagcacagc
                                                                     2640
acttaateet ttacattgte tatgatgeaa agacetttgt teaegtgttt gtetgetgae
                                                                     2700
cetetececa caattgtett gtgaccetga cacatecece tettegagaa acacecacaa
                                                                     2760
atgatcaata aatactaagg gaactcagag getggeggga teeteeatat getgaaeget
                                                                     2820
ggtteecegg gteecettat ttetgtetet ataetttgte tetgtgtett tttettteet
                                                                     2880
aagtetettg ttecacetta egagaaacae cacaggtgtg gaggggcaae aagagaetta
                                                                     2940
ggaaa
                                                                     2945
```

```
<210> 5122
<211> 741
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (742)...(205)
<223> similar to gi777776 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5122
tttttttggg ctgccctcat gggccagggt gtttattcac agagcaacag agtcagcaca 60
gggcagggaa cgcccaggcc tcagcatatc ctgagacctg cagcctgtcc cagcctgggc 120
ggggcaggtg tccggtccct ggctagggtc tgaccaagtg ctggatgtca cgtgaggaag 180
```

```
cggggccttg tctggggtgg tctacggatc actggtgaca tatgccggga gggtgacacc
                                                                      240
                                                                      300
atcogcattg aaaaggatgt tgtcaaagcc aggggctgtg gcctctgtgt tgctctggaa
                                                                      360
ggggcagete ceettettgt geageeagee eegteeecea agteeeagea geaceaggag
                                                                      420
catgagcaat aggagggcac tgccaaccac agctggcaca gacccgggtg cggctgtgtt
                                                                      480
eccegggetg ggggcagget getggcaatg etgeccagee agataeteea egteateeag
ggcaatgggc cccagggctg gctggccgcc cagagtggct tcaaacacga tctggaactc
                                                                      540
cttggcactg gctacctcca cctgggcctc cagccactgg tgccgccgat gcccgcctgc
                                                                      600
gececacaca gecagetgge cetgageact gtgcageagt acetteaget ecceettgta
                                                                      660
gaagtgetea ggaaaaceea tgtggtacea gaageggagg caggaggetg gggtggeegg
                                                                      720
cagaggeteg etgegeagee a
                                                                      741
```

```
<210> 5123
<211> 1521
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1522)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1448) ... (623)
<223> similar to gi453197 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5123
ttttttttt ttacatcttc actgtagaaa atttatttgc ctttccatgg acaacaatca
                                                                       60
tttgtattat tatcagtttt ctacaacacg tagagttgtc aaatagctta aagacaagga
                                                                      120
caagtataga cccttctaga atcagataac tcctagaaag gtcttctaga caatctgtag
                                                                      180
tgaagttaag taataccttc aagatttcac aaactgtaaa ctcgatctgg gaattcaacc
                                                                      240
cagatetata ttgttetgga aatteeagge tettttttte tgtateaaga agettttgga
                                                                      300
ctggaagagt gtttttcagc aggaattgtg gtattggcca cccatcaccc catttaatta
                                                                      360
aaaatccctg gcctacagga cctacagcaa tgtactgaag aacttcagaa cctcaattag
                                                                      420
ccatttgcca tcttgagaga gtcttgtcca tggttcaagt gttcccttgg aactcctgaa
                                                                      480
gggcttggag cttagtctga gccatgggaa atggccaaag agtctcaaga ttcccactgt
                                                                      540
atcctgtgcc ttggagcagg caaggagacc atggcagccc ctggccccgg tcagttcttg
                                                                      600
getttggcag tteegggace aggacgetgg tacageegga ttateeette ategtgtage
                                                                      660
egettecaga ettetetete cagettgaag teatggttta tgtaaaagat cageegette
                                                                      720.
catgatgtat catagtagtg atcagaaaag cgctcatggc cctcagtgat gaagccataa
                                                                      780
gcactcacct ggtcacagag ctgaagggca gtgagcagca ggagggcccc agtggtgggg
                                                                      840
eggtatatee tecagtggge accatecagg gtettagace teagaaacet gttetteatg
                                                                      900
tateggagaa agtetgggtg cageaacagg teeetgteea tgtgcaggge tteeegaaaa
                                                                      960
gcttcctggg gtctgtgcct gaaccagaaa aggttttttg acatcaccgt ctgattcata
                                                                     1020
agcagtgett ceageeacte atagteeegg gtgeetteea ggaagtgeaa gtageggaeg
                                                                     1080
teetteecaa gaggeaegtt ettgaaaeee egattgeeca atataaggag tgaetgggte
                                                                     1140
agggagaagg cggtaaagcc gtagaaggat gtccgagtcc ccacatcctg ttcgtagcct
                                                                     1200
ttaatgagag ctccgctcaa tcggaacacg tagtcgtgac tgtctatctc ctggcccatg
                                                                     1260
tgggagttgt tcaggatgec ecegttgeec accaeggeac aggtgatget eeggaggete
                                                                     1320
```

```
ccagcgggga ggctggccag gagcagctgc tgctggggcc ctggagggaa gcgtgtctcc 1380 cccttttgcn ccaaggagta gttgagctcc atgaaaccaa agggtggtgc aaagtgttcc 1440 aggcgcgtac gagtgggcag tcccggnaat tccggnccgg tncgacggtt gtcgaagcta 1500 tcaattntcn ngnangcccc g
```

```
<210> 5124
<211> 5840
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(4096)
<223> similar to gi3449298 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

# <400> 5124 gecetgeeca ceteaegeag actgeeggga cetetggeag acettttett geacetgeea 60 gecaggitae taeggeeeag getgtgtgga tgeetgeete etgaaceeet gteagaacea 120 gggatcatgc 'cggcacctgc caggagcccc ccatggctat acctgtgact gtgtgggtgg 180 240 ctatttcggg caccactgtg agcacaggat ggaccagcag tgcccacggg gctggtgggg gageceaace tgtggeeect geaactgtga tgtteacaaa ggttttgate ecaactgeaa 300 caagacaaat gggcagtgtc actgcaagga gttccactac cgaccgcggg gcagtgactc 360 ttgcctccca tgtgactgct accetgtggg ctccacctcg cgctcatgtg caccccacag 420 egggeagtge ceetgtegee caggageeet tggeegeeag tgeaacaget gtgacagtee 480 cttcgcagag gtgacagcca gcggctgccg ggtgctctat gatgcctgcc ctaagtccct 540 600 gagatetggt gtgtggtgge eccagacaaa gtttggegte etggecacag tgeeetgtee ccggggggcc ctgggattgc ggggtgcagg tgctgctgtg cggctgtgtg atgaggccca 660 gggttggctg gagcccgacc tcttcaactg tacctccct gcctttcgag agctcagtct 720 gctgctggat ggcctagagc tgaacaagac ggcactggat accatggagg ccaagaagct 780 ggetcagegg ctacgggagg tgactggcca cactgaccac tattttagcc aagatgttcg 840 agtcactgcc egectgetgg eccacetget ggcettegag agecateage agggettegg 900 gctgacagec acacaggatg cccacttcaa tgagaatctg ctgtgggccg gctctgcact 960 gettgeecea gagacagggg acttgtggge ggegetgggg cagegggeec etgggggete 1020 cccaggcage gegggaetgg tgaggcaeet ggaggagtat geagecaeae tegeaaggaa 1080 tatggaactc acatacctga atcccatggg gctggtgacg cctaatatca tgctcagcat 1140 tgaccgcatg gagcacccca gttctccccg gggggcccgt cgctaccctc gctaccatag 1200 caacctettt egaggecagg atgeetggga teetcacace catgtgetge tgeetteeca 1260 gtccccacgg ccatccccat ctgaagttct gcccacaagc agcagcatag aaaactccac 1320 cacctcaagt gtggtccccc caccagcccc gccagagcca gagcctggga tctccattat 1380 cattetecte gtttacegea cettaggggg actgetecet geccagttee aggeagaaeg 1440 ecgaggtice aggetteete agaaceeegt catgaactee eeggtiggtea gegtiggetigt 1500 gttccacgga cgcaacttcc taaggggaat cctggagtcc cccatcagcc tagagtttcg 1560 cetgetacag acagegaate ggageaagge gatetgtgtg cagtgggace cacetggeet 1620 ggcggagcag catggtgtgt ggacagcacg ggactgcgag ctggtgcaca ggaatgggtc 1680 ccacgcacgg tgtcgctgca gccggacagg gacctttggg gtcctcatgg atgcctctcc 1740 ccgtgagagg ctggagggcg acctggagct gctggctgtg ttcacccacg tggtcgtggc 1800 tgtgtctgtg gctgcgctgg tgctgactgc agccatcctg ctgagcctgc gcagcctcaa 1860 gtccaatgtg cgtgggatcc atgccaatgt ggcagccgcc ctgggggtgg cagagctcct 1920 ettectgetg gggatteaca ggacceacaa teagetggtg tgeactgeag tegteateet 1980

```
cetgeactae ttetteetea geacettege gtggetette gtgeagggge tgeaceteta
                                                                    2040
cegeatgeag gttgageeac geaacgtgga eegeggegee atgegettet accatgeeet
                                                                    2100
gggctggggc gtccctgctg tgctgctggg ccttgctgtg ggcctggacc ctgagggcta
                                                                    2160
tgggaaccct gacttctgct ggatctcagt ccacgagccc ctcatctgga gctttgctgg
                                                                    2220
ccctgttgtc ctggtcatag tgatgaacgg gaccatgttt ctcctcgctg cccgcacatc
                                                                    2280
ctgctccaca gggcagaggg aggccaagaa gacctctgca ctgacccttc gcagctcctt
                                                                    2340
                                                                    2400
cctgctgctt ctgctggtca gtgcctcctg gctctttggg ctcctggcag tcaaccacag
catectagee ttecaetace tecatgetgg actetgegge etceagggee tggeggtget
                                                                    2460
getgetette tgtgteetaa atgeagatge tegggetgee tggatgeeag eetgtetggg
                                                                    2520
caggaaggca gcgcctgagg aggcaaggcc agcacctggg ctgggacctg gggcctacaa
                                                                    2580
caacacggct ctctttgagg agagtggcct catccgcatc actctgggcg cctccaccgt
                                                                    2640
etectetgtg ageagtgeec geteeggeeg gacceaggae caggaeagee ageggggeeg
                                                                    2700
cagetacete agggacaatg teetggtteg acatggetea geegetgace acaetgacea
                                                                    2760
cagcetecag geteatgetg geceeactga cetggaegtg gecatgttee ategagatge
                                                                    2820
2880
tecatettea gaaagegagg acaatggeeg gaegeggggg egetteeaac ggeeaetetg
                                                                    2940
ccgagcagcc cagagtgaga ggctcctcac ccaccccaaa gatgtggatg gcaatgacct
                                                                    3000
cctgtcctac tggccagccc tgggggagtg cgaggcagcc ccctgtgctc tgcagacttg
                                                                    3060
gggctctgaa aggcgcctgg ggctggacac cagcaaggat gcagctaaca acaaccagcc
                                                                    3120
agacceggee etgaccagtg gggatgagae ttetetggge egggeecage gecagaggaa
                                                                    3180
aggeateetg aagaaceggt tgeaataeee aetggtgeea cagaeeegag gtgeeeetga
                                                                    3240
getgteetgg tgeegtgeag ceacettggg ceacegtget gtgeeagetg cetettaegg
                                                                    3300
togcatctat gctggcgggg gcacgggcag cctttcacag ccagccagcc gctactcttc
                                                                    3360
tagagaacag ctggacctgc tcctccggcg gcaactgagc cgtgagcgac tagaggaagc
                                                                    3420
ecctgeeect gttetaegte ecctgageeg geeagggtee caggaatgea tggatgetge
                                                                    3480
accaggeega etggageeca aagategggg eageaceetg eeaeggagge agecaceteg
                                                                    3540
ggactaccet ggcgccatgg ctggccgctt cgggtcacgg gatgcgctcg acttaggggc
                                                                    3600
                                                                    3660
acctegagag tggttgagea egetgeetee geecegeege accegggace ttgacecaca
geoceacet etgeceetgt etecceageg geaactetea agggaceece tettgecate
                                                                    3720
ceggeegetg gactetetgt etaggagete gaactetegg gageagetgg accaggtgee
                                                                    3780
tagccggcac ccctcacgag aagcccttgg gccactcccg cagctgctca gagctaggga
                                                                    3840
ggactcggtc agtggcccca gccatggccc ctccacagaa cagttggaca ttctttcctc
                                                                    3900
catectigee tettteaact ecteggeeet etectetgtg caatetteaa geacaceett
                                                                    3960
gggccctcac accactgcca caccttctgc cacagcctct gtgcttgggc cctccacgcc
                                                                    4020
acgttetgee aegteteaea geatetegga getgtegeea gaeteagaag tteeeagaag
                                                                    4080
tgagggtcac tcctgagggg atgacggcgt ggacgaggaa cagctgaggg cgacagagga
                                                                    4140
tetaggetaa caggagagae tecaggagtg ggggeagate ceaaggeage etectgetee
                                                                    4200
ccagtggtgg gtgccccagc tctacctggt gtggcagggc tgaggctcca tgtgcatctg
                                                                    4260
tgagcatgcg tgtgacaggt gcagagacgg gggactggag ggagactttt atacgttttg
                                                                    4320
tacctttgta accagagaga tgcttatgtt atttttcagc ttttctgtct cctggggggt
                                                                    4380
ttgaggctgg gctgggaggg ggagggagat agagggagag atgcagtttg accccatttg
                                                                    4440
ggtcctgagc aaaccctatg ctcatctctc tctccttcct ggggtggact cagatgggtg
                                                                    4500
ggacacatgc cttcctcccc ctattccacc cccaagttga tctgagtatc gtcaggggcc
                                                                    4560
caaagtacag aattgttctt tgctttttat tgaatgctcc aaaggccaaa cttctggggc
                                                                    4620
tgggggttgg tettggaaac aggggteete tgaetteete atgggggett geteataceg
                                                                    4680
cccctcctgg tggatgtgtg tgtttattat gtggagtccc tgccacttac tgccttatga
                                                                    4740
cctaggactg atgctgtggg gtgctggtgg agcagctgat gtcgtgttta cagagcaagg
                                                                    4800
ettecetgte teceaegggg aggggetegg geetetagte agacatteet geagagggte
                                                                    4860
ggtggagggg tcattcacct gcccctgcag caagcaaaag ttgtctgtgg tgccatttga
                                                                    4920
ttccctgaca ctgccccctg cttgaattga ttccgaaggg tagggtggga aggtgagcaa
                                                                    4980
agggagcaga aacaagggaa ttcaagaccc agaatgtagg tgccactgcc tcctatgttt
                                                                    5040
acaggatect eegtggeeet aggeaeetgg getgeaggaa gtgaeteegt tecaeteete
                                                                    5100
ctttattccc ttaaaaaggg aaaaatgact gttacgaccc tgttcacaaa actcttactt
                                                                    5160
ttgctatttt gtctgctgtc cagaactgaa gactttaaaa ttttgttact gtttacaagt
                                                                    5220
ccagattcaa aaaatgtttt tactttgttt acaactcaaa actttgagtt ttacactttg
                                                                    5280
tttacagtag ataattttt ttcctttgtt tccaagtgaa aggtagggaa agtgggagag
                                                                    5340
ggacttggag gacccacctg tgaggaccct gacctggcca tcttgagggg ttttctaacc
                                                                    5400
```

```
cccaggtctc ccaggccgaa ggtcagcctt gagtcccgtt taacagcaga tccagaagac
                                                                     5460
cttgagagta ggcgtcctct aaccacgggg gagagtggct gtgcagggct ggggggtggt
                                                                     5520
ctgtgcagac acctecteae ceaecacece atgeatacte ttgggaagea getteetggg
                                                                     5580
agattagaaa ttctacttcc ctgactggag ctaaatccca ccagccagga cccaaactct
                                                                     5640
ccttaccgag aaggacccca gctcttgaag ggctgagtgg cctgctgggg gtgggagggt
                                                                     5700
gtetttaeta tgteetaggt ttegtagatg eceetetetg gggtteeeet eeteeageee
                                                                     5760
ageggeeete ttteetgtet gtgtaaattg tteegtgaag eegegetetg ttttgggaat
                                                                     5820
                                                                     5840
aaacttctat agaaaacaaa
```

```
<210> 5125
<211> 1697
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1585)...(1292)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5125 tttcgtgtgg tgggctgcgg gtaggggagg ggatggaccg agtcccggct tgtcgggatg 60 agggttccgg aagatctggc cagtaagatt ctactccctg gctgtgcacc gggttcccta 120 cccctgtcta cgtcggctcc gccacttcgc ggcttgagac taaaagagca tcccggcagg 180 gggccttcca gccccaaagc agcctgtcca gagaccccca aattctgatc ctgaagttgg 240 aggeeteegg ggatgttett tittaatett tiaaaagggt tagaggggtt gaggetgeet 300 gaccccagcc taatggggta ggtaggcctt gggaagtgga gcatgggggc aaaggatcca 360 agcattgage etteateete tatteeecat eeagtggggt geegaggete aggeageatg 420 acgacggaga cctttgtgaa ggatatcaag cctgggctca agaatctgaa ccttatcttc 480 attgtgctgg agacaggccg agtgaccaag acaaaggacg ggcatgaggt tcggacctgc 540 aaagtggcgg acaaaacagg cagcatcaat atctctgtct gggacgatgt tggcaatctg 600 atccagectg gggacattat ceggeteace aaagggtaeg etteagtttt caaaggttgt 660 ctgacactat atactggccg tgggggtgat ctgcagaaga ttggagaatt ctgtatggtt 720 tattctgagg ttcctaactt cagtgagcca aacccagagt acagcaccca gcaggcaccc 780 aacaaggcgg tgcagaacga cagcaaccct tcagcttccc agcctaccac tggaccctct 840 getgeetete cageetetga gaaccagaat gggaatggae tgagtgeece accaggteec 900 ggtggtggcc cacatecece teatactece teccaeceae ecageaeeeg aateaetega 960 agecagecea accacace tgeaggeeeg cetggeeett ceageaacee tgttagtaac 1020 ggcaaagaaa cccggaggag cagcaagaga tagcatgaca ttctttcttc ctgccaccaa 1080 ccacatecca agtgteccet ggagageaag atageettee aetgattgge tggtgtagea 1140 gtattttagc cactgaactt cagtggaggg tggtgagcag tgtccttatc caccctaatc 1200 tcatactccc tcattgtcca gctgaactac ctgtcccctg ggagtcagga ccctctgcct 1260 getetettte etetttagaa atggeagtta etggetggge geagtggete aegettgtaa , 1320 teccageact ttgggaagee gaggtgggeg gateacetga ggtegggagt teaagaceag 1380 cctgaccaac atggagaaac cccgtgtcta ctaaaaatac agaattagcc aggcatggtg 1440 gcgtatgcct gtaatcccag ctacttagga ggctgaggca ggagaatctc ttgaaaccgg 1500 gaggeggagg ttgaggtgag cegaaattge accattgeac tecageetgg geaataagag 1560 1620 accatctgtt tettetgtgt gagacatggg agtetaactg aagtetetee tteetaataa 1680 atgttaccac ttctaaa 1697

```
<210> 5126
<211> 2577
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (475)...(1294)
<223> similar to gi310660 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5126
atttccatga aatgggatca agtggaggtg atcccatata ttgcctgtgg gaatgccagt
                                                                     60
totaacagot otgogggtgg cogootggta tootttgaag tgocacagaa cacotcagto
                                                                    120
aagattegge aagatgeeae tgeeteaetg attttgetet ggaagggeae ggeeaeagga
                                                                    180
ttecaacagt geteceteat agatggaega agtgtgaece eeetteagge tteaggggga
                                                                    240
etggteetee tggaggagat getegeettg gggaataate aetttattgg ttttgtgaat
                                                                    300
gattetgtga ctaagtetat tgtggetttg egettaacte tggtggtgaa ggteageace
                                                                    360
tgtgtgccgg gggagagtca cgcaaatgac ttggagtgtt caggaaaagg aaaatgcacc
                                                                    420
acgaagccgt cagaggcaac tttttcctgt acctgtgagg agcagtacgt gggtactttc
                                                                    480
tgtgaagaat acgatgettg ccagaggaaa cettgecaaa acaacgegag etgtattgat
                                                                    540
gcaaatgaaa agcaagatgg gagcaatttc acctgtgttt gccttcctgg ttatactgga
                                                                    600
gagetttgee agtecaagat tgattactge atectaaace catgeagaaa tggageaaca
                                                                    660
tgcatttcca gtctcagtgg attcacctgc cagtgtccag aaggatactt cggatctgct
                                                                    720
tgtgaagaaa aggtggaccc ctgcgcctcg tctccgtgcc agaacaacgg cacctgctat
                                                                    780
gtggacgggg tacactttac ctgcaactgc agcccgggct tcacagggcc gacctgtgcc
                                                                    840
cagettattg acttetgtge ceteageece tgtgeteatg geaegtgeeg cagegtggge
                                                                    900
accagetaca aatgeetetg tgatecaggt taccatggee tetaetgtga ggaggaatat
                                                                    960
aatgagtgee teteegetee atgeetgaat geagecacet geagggaeet egttaatgge
                                                                   1020
tatgagtgtg tgtgcctggc agaatacaaa ggaacacact gtgaattgta caaggatccc
                                                                   1080
tgcgctaacg tcagctgtct gaacggagcc acctgtgaca gcgacggcct gaatggcacg
                                                                   1140
tgcatctgtg cacccgggtt tacaggtgaa gagtgcgaca ttgacataaa tgaatgtgac
                                                                   1200
agtaacccct gccaccatgg tgggagctgc ctggaccagc ccaatggtta taactgccac
                                                                   1260
tgcccgcatg gttgggtggg agcaaactgt gagatccacc tccaatggaa gtccgggcac
                                                                   1320
atggcggaga gcctcaccaa catgccacgg cactccttct acatcatcat tggagccctc
                                                                   1380
tgcgtggcct tcatccttat gctgatcatc ctgatcgtgg ggatttgccg catcagccgc
                                                                   1440
attgaatacc agggttette caggecagec tatgaggagt tetacaactg cegeageate
                                                                   1500
gacagcgagt tcagcaatgc cattgcatcc atccggcatg ccaggtttgg aaagaaatcc
                                                                   1560
cggcctgcaa tgtatgatgt gagccccatc gcctatgaag attacagtcc tgatgacaaa
                                                                   1620
cccttggtca cactgattaa aactaaagat ttgtaatctt tttttggatt atttttcaaa
                                                                   1680
aagatgagat actacactca tttaaatatt tttaagaaaa taaaaagctt aagaaattta
                                                                   1740
aaatgctagc tgctcaagag ttttcagtag aatatttaag aactàatttt ctgcagcttt
                                                                   1800
tagtttggaa aaaatatttt aaaaacaaaa tttgtgaaac ctatagacga tgttttaatg
                                                                   1860
taccttcage tetetaaact gtgtgettet actagtgtgt getettttca etgtagacae
                                                                   1920
tatcacgaga cccagattaa tttctgtggt tgttacagaa taagtctaat caaggagaag
                                                                   1980
2040
gcatatgatg tataatagag tatacccgtt acttaaaaag aagtctgaaa tgttcgtttt
                                                                   2100
gtggaaaaga aactagttaa atttactatt cctaaccega atgaaattag cctttgcctt
                                                                   2160
attctgtgca tgggtaagta acttatttct gcactgtttt gttgaacttt gtggaaacat
                                                                   2220
```

```
tctttcgagt ttgttttgt cattttcgta acagtcgtcg aactaggcct caaaaacata 2280 cgtaacgaaa aggcctagcg aggcaaattc tgattgattt gaatctatat ttttctttaa 2340 aaagtcaagg gttctatatt gtgagtaaat taaatttaca tttgagttgt ttgttgctaa 2400 gaggtagtaa atgtaagaga gtactggttc cttcagtagt gagtatttct catagtgcag 2460 ctttatttat ctccaggatg tttttgtggc tgtatttgat tgatatgtgc ttcttctgat 2520 tcttgctaat ttccaaccat attgaataaa tgtgatcaag tcaagggaaa aaaaaaa 2577
```

```
<210> 5127
<211> 6152
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1906)
<223> similar to gi3327076 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5127 gegeetgege atagaceeca getgeecaca getteectae actgtgeate ggatgtteta 60 cgaggccctg gataagtatg gggacctcat cgctttgggc ttcaagcgcc aggacaagtg ggaacacate tectaetece aatactaeet getegeeege agageegeea agggetteet 180 gaagetegge etgaageagg eccaeagtgt ggecateete ggetteaaet ecceggagtg 240 gttetteteg geagtgggea eagtatttge aggtggeate gteaetggea tetaeaceae 300 cageteecca gaggeetgee agtacatege ttatgactge tgegeeaatg teateatggt 360 cgacacgcag aagcagctgg aaaagatcct gaagatctgg aaacagttgc cacatctaaa 420 ggcagtcgtg atatataaag aacctcctcc aaacaagatg gccaatgtgt acacgatgga 480 ggaattcatg gagctgggga atgaagtgcc tgaggaagcc ctggacgcca tcattgacac 540 ccagcagccc aaccagtgct gtgtgctagt ctacacttcc ggcaccactg ggaaccccaa 600 gggcgtgatg ctgagtcaag acaatatcac gtggacggca cggtacggca gccaggccgg 660 tgacateegg eeggeagaag teeageagga ggtggtagte agetacetge eeeteageea **720** tattgccgcc cagatctacg acctgtggac aggcatccag tggggggccc aggtttgctt 780 tgccgaaccc gacgccctga aggggagcct ggtgaacacg ctgcgggagg tggagcccac 840 atcacacatg ggggtgcccc gggtatggga gaagatcatg gagcgcatcc aggaggtggc 900 ggctcagtct ggcttcatcc ggcgaaagat gctgctgtgg gccatgtcgg tgaccttgga 960 gcagaacete acetgeeeeg gcagegacet gaagecette acaaceagae tggcagatta 1020 cctggtgcta gccaaggttc gccaggcact gggatttgcc aagtgtcaaa agaacttcta 1080 tggageggee eccatgatgg cagagacaca geaettette etgggtetea acateegett 1140 gtatgcgggc tacggcctca gtgagacctc aggcccccac ttcatgtcca gtccctacaa 1200 ctaccggctg tacagctcag gcaagttggt gcccggctgt cgggtgaagc tggtgaacca 1260 ggacgcagag ggcattggcg agatctgcct gtggggccgc accatattca tgggctacct 1320 gaacatggag gacaagactt gtgaggccat cgacgaggaa ggctggctgc acacgggtga 1380 tgctggccgc ctggacgccg atggcttcct ctacatcact gggcgcctca aagaattaat 1440 catcacagct ggtggggaga atgtgccccc tgtgcccatc gaggaggccg tgaagatgga 1500 gctgcccatc atcagcaacg ccatgctcat tggggaccag aggaagttcc tgtccatgct 1560 gctcaccttg aagtgcactc tggacccaga cacctctgac cagactgata atctgactga 1620 acaagctatg gagttetgee agagggtggg cageagagee accaeagtgt eegagateat 1680 agagaagaag gatgaggccg tgtaccaggc catcgaagag gggatccgga gggtcaacat 1740 gaacgcggcg gcccggccct accacatcca gaagtgggcc attctcgaga gagacttctc 1800 catttcgggt ggagagttgg gtcccacgat gaaactgaaa cggctcacag ttttggagaa 1860

```
1920
qtacaaaqqt atcattqact ccttttacca agagcaaaaa atgtaatcaq qgcctatgcc
tgcagtttct atagaataga gggcaggcgt tccgagcctc ttcctgagcc ccaggtctct
                                                                    1980
                                                                    2040
tcagtctggg cacaggcatt tctgccaagt ctgttagatc tccaggtcag ggcacagcac
                                                                    2100
tggctctaca tttaccaggt cttacgccaa caatagctga caattccaag aagcttcacg
tgtgggtagt tttaattcag tttaagtatt gctttttgtt caggtgacaa atgagatcag
                                                                    2160
ctctccttcc agaacgaaag ggctgataat ttttggcctt agttccaggt agattaaaaa
                                                                    2220
                                                                    2280
getgetaget cacatacagg acagecagea gtaggetgtg gagegggtag gagagagatg
getgatactg etcaegtgeg etgeaggaaa ageaateagt cacaacteae etagegaeet
                                                                    2340
gacttactct ggaatcttgg cgggcatcgc cgaccctatt attccattac caggcactcc
                                                                    2400
                                                                    2460
gccacccaca tgccaactga cttgatgctt aataaaactg ctgctgcctg tttgattcta
tttaatgtat aatttgaata ttaaaccttt taacagaact gtcaacaagg acctgatttt
                                                                    2520
ttttgtcaat tgagcaggtg ggaccagtgc agagagtagt gggcatttaa ctcacaggac
                                                                    2580
                                                                    2640
tgtgcacage gggcatgega gtgaccatta gtgccctgga ataaacaaag gtgcaggatg
gggtcaagtg gcgcattctc ataaaagcag ccagctttac gttagcctgt cgccaccaga
                                                                    2700
ccaccccact tccattctga atacgggaag cagccattct cagtagcaag ctgagccaaa
                                                                    2760
                                                                    2820
atgaccgaag gcatttgaac aggaaacagg tagagaaagc aaacatctca gttttggaat
tetttattae titgaaceca agageeeetg ataactggea caatecaatg aaacagagga
                                                                    2880
agcagcagct taaacaaagg aaaatacatt taagattata agtctggggg ggcggttaca
                                                                    2940
agettaaaaa gtgacccaga cagggatate attgetaaaa aaaaaaaaat cecettgtga
                                                                    3000
cctgggtaca ttttgcaaag ccacaggttt gcaatgttac acaagggcca aaggaggcca
                                                                    3060
tgagttgtct ttggttgtgg ggacagaggg taactgttca tgaaaatagt gagtgtctga
                                                                    3120
agattaagaa aatcatgctg cagcagagga gaagggagag gaagacagga agggaaagga
                                                                    3180
gatgeetgag ggteaaaage tgageecaag cetaageeca ageteaaget caageeccag
                                                                    3240
catggcataa ttttgtgaat taactcaggc tgagttgcct ccagtctttg gaatgtcatc
                                                                    3300
ttatactggt actgctgagg cagagggcag taattggtgc tttgggatag gagaaggggc
                                                                    3360
agttgctgaa atacaaaatt aatagcatcc caagttcctc aattgcagcc aaaatacatg
                                                                    3420
tgttcgggcc tttcggcagt atcgccccca gaactacctg ctgtagtgtg gtccattccc
                                                                    3480
agacagcaac atgcaagaat aagtttacaa tacactcagc ccttctggct tcagatcagg
                                                                    3540
ggctcagagg ctgtgacaac tcatgatgct gaaaatgtat ccagtgaaaa tgaagtacta
                                                                    3600
getetetget teattaaaag etettggaaa gaatattaaa teteaagaca acaaaataat
                                                                    3660
tgaacacaca atacatttgt gtctttgtat ccaatatatt acctttgtct tattaacaaa
                                                                    3720
aattatatet eteattatat atttettgga tetgaagttt ttatteacae teagtaattt
                                                                    3780
ctgtaaagga caaatctgtc tctattttcc atatcattta gaaatatacc acattcactc
                                                                    3840
tttttgatgt gaactttccc aggaaaattc tcttgtgccc atttagtttt agaagagtgt
                                                                    3900
cattttgtgc tattatgtca atatcctgtt ttatttccat tatgtttttc aaaaaccgaa
                                                                    3960
gaaaataagg tttttcttaa aaagttagac attttctctt gttaattctg tatcctgtta
                                                                    4020
tttacagctg aagagaaact attttaactt aagtgtaaaa tggtttagaa tagcaaatga
                                                                    4080
                                                                    4140
tacagtccac tcagagttta caaaaaaaac atttaccagg tagacactta ataaataaaa
caagcacttg gaaaaagttc tttgaaaaca gacctaggga catccacctg catcttttgc
                                                                    4200
acagattttg ttaagaaaag gccagatcta aaaatgtact gtcaagaaac aagcaaacca
                                                                    4260
atgcatacat acgtaggtat tctaaacaga ggttcatgtg gtgtccattt agagtgactg
                                                                    4320
atgtaaatgc cagttgtaga agtgttaatc taaatctttt actcggcgac agatttcctc
                                                                    4380
tgtgaagtet gageattttg cattgeetee caaatetttt gteaagetet gagaaaagga
                                                                    4440
4500
tcagtgagat gccacctggg caagttactc ggctgctctt tcatttagtt cctcatttca
                                                                    4560
aagtgaggaa ccactccacc accatctacc cagcccagga ggatcgggat ccaatctcat
                                                                    4620
agtgtataca acagcactct gcaaagaata aggtgctctt gatgcaaagg gaggcaggga
                                                                    4680
getttaccaa aatttteeet ttgtteacac aatagaceet aacccagatt agttggteat
                                                                    4740
ggatatttaa ataaaagcga atctaaataa gaagtttcat aaaaatcctt gggaaatatg
                                                                    4800
tctcaggaat agacctgaga catattttga tctatttttg tttttattat tattttttt
                                                                    4860
ttagatggag teteactetg ttgeccagge tggagtgeag tggcacgate ccageteace
                                                                    4920
acaacetetg ceteetgggt teaagegatt eteetgeete agegteetga atagetggaa
                                                                    4980
ttacaagtgc atgccaccat acccaactaa tttttgtatc tgatctattt ttggaggctg
                                                                    5040
ggacacaaat acgaaagaaa tatttaaatc attaactctt tttttttt taagagatgg
                                                                    5100
ggtctcacta tgtggcccag gctggtcttg aactcagagg ctaaggtgat cctcctgcct
                                                                    5160
cagectatag etgeaactae aggeatgeae caccacacet geetaaatea ttaactetta
                                                                    5220
aacctccctc tttaggaaag aaagcctccc atacaactga tctgttctac cagcttatcc
                                                                    5280
```

```
tttctttcct gcatacagac cccaatatat ttaattctct ttatctttcc atcctacaca
                                                                     5340
ataaaagggc ccactatgta attcaggcac ctctctactg ggctgtagat tataacttcc
                                                                     5400
caaatataac tttaaagaat aagaaaatca tatgacctcc aatgtgacta tcaggctgtt
                                                                     5460
aaaaacaagc ctgaatttct tgtattttgg ccacacgata taatttcaaa ttacagaatt
                                                                     5520
tttttaaaag aagggaccaa ctttgaagat attacgctaa gtgaaataag ccagactcaa
                                                                     5580
aggacaaata ctgtatgatt ccacttacat gaggtaccta gagtagtcaa attcatagag
                                                                     5640
acaggaagca gaatggcagg tgtcagagga tgggaggggg aagggaaagt tactgtttaa
                                                                     5700
cgggtgcaga gtctcagttt gagaaaatga aactggtctg gagatgactg atggtgatgg
                                                                     5760
ttacattaca atgtgaatgt acttaacatt attgaactgt atacctaaat acggctaaaa
                                                                     5820
tggcaaattt tatgttatgc atatttttca caatttttgt taaaaaggac ctcaaattag
                                                                     5880
ggatgagtet teaagtgeat tattteetet aactteggaa tageeegega eacttettee
                                                                     5940
acaggecaca attgettace gaggeggtgg agettgttgg gtaaggeeca gaetgegtgt
                                                                     6000
taataccaac ttgggtcatt taggagctgt aaaaccttgg acatattatt tattctctct
                                                                     6060
gtacctcagt ttcctcatct ataaaatgga attatagcat ctacttcaaa gagttataga
                                                                     6120
aaaactttgc tgagatgata tataaagaac tt
                                                                     6152
```

```
<210> 5128
<211> 2771
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(497)
<223> similar to gi4884128 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5128
gatetgageg eeggeeggg tgeecaggea etceettgge gggeeggatg geggaedeeg
                                                                       60
geccagatee egaatetgag teggaategg tgtteeegeg ggaggteggg etetttgeag
                                                                      120
actittactic ggagaagagic cagtititgtt tittgtgggca tgtgctgacc atcacgcaga
                                                                      180
actttgggtc ccgcctcggg gtggcggcgc gcgtgtggga cgcggccctg agcctgtgca
                                                                      240
attatttcga gagtcaaaat gtggatttcc gaggcaagaa ggtgatcgaa ctgggtgcgg
                                                                      300
ggacaggcat cgtggggatc ttggcagcgc tgcagggagc ttatggtcta gtgagggaga
                                                                      360
cagaggacga tgtcatagaa caagaactct ggcgaggtat gcgtggagcc tgtggacatg
                                                                      420
ctctatccat gtctaccatg actccctggg aatccatcaa gggaagctct gtcaggggg
                                                                      480
gatgttacca tcactgacct gcccctggcc ctagaacaga tccagggcaa cgtccaggcc
                                                                      540
aatgtgccag ctggaggcca ggcccaggtg cgtgccttgt cctgggggat tgaccatcat
                                                                      600-
gtcttccctg caaactatga cctggtgctg ggggctgata tcgtgtacct ggaacccacc
                                                                      660
ttccctctgc tgctggggac cctccaacac ctgtgcaggc cccatggcac catctatctg
                                                                      720
gcctccaaga tgagaaagga gcatgggaca gagagcttct ttcagcacct cctgcccag
                                                                      780
catttccaac tggagctggc tcagcgggat gaggatgaaa atgtcaacat ctatagggcc
                                                                      840
aggcacaggg aaccaagacc tgcttgacat caccettget gttcttctca atctettget
                                                                      900.
ctaatgaagg aactgtgtat ctcaaaaacc atatttccag agccacaaac atgaggacca
                                                                      960
aaaaggatgg atttccctgg cctctctcac tttcctcctt ccctctttgt taccccagat
                                                                     1020
actettggge aggtgeagtg aggtgeetge ttacaaggaa teecagagtt etggeageae
                                                                     1080
tagtgttaga acaccaagga ggttcctggc tcctgttctc agagaaggag gatggtaagg
                                                                     1140
tatccaggat ttttaggggg taagggagat atatgggatg tgagagcagt gattgtagac
                                                                     1200
agactgtcac tgatcacttc cattcctgtt gctgtttaca cagaatggac tttaaaaaaa
                                                                     1260
ttctgtggga ttttttttc ttttttctt ttttttgaga cagggtctca ctctgtcatc
                                                                     1320
```

```
1380
caagetggag tgcagtggtg tgatcacage teactgcage etcaacetet gaaggeecag
atgatettee tgeeteaget ecceaagtag etgggaetag aggeatgege eaceaeacee
                                                                     1440
                                                                     1500
ggctaatttt tgtattttca gtagagacag ggtttcgcca tgttgcccag ggtggtctca
                                                                     1560
aactcctggg ctcaagtgat ccacccgcct tgcctcccaa agtgctggga ttgcaggcat
ggcccactgt gctagcctag gattttttt ttttttaag aaagaattaa gccttaaaaa
                                                                     1620
                                                                     1680
tctattgtgc aagaacccaa cttttactca ggagctgaga aggaagaagc ctcaaaccac
                                                                     1740
ccatttcctg ctttttagag atagagtcta gtggaaccat ggctctaact gggtcaagtc
ctcctagctc tgaagctaag gctgcagagc tgtcctttgg actgtagttt cttcatgctt
                                                                     1800
tecagagtta gageettgat caeggaacat cattgtgtge agaagaatae tgtacetagt
                                                                     1860
actaagttct tttcatcttt gatttttctt tagcttcatc agtccttcct tcctaatctc
                                                                     1920
                                                                     1980
taatcccctg aagcctaaca cagttcctaa tgtgttttgc cttaacctct tttctcttcc
                                                                     2040
cacattggta cttctggttg gggctctctt tacttactgc ttaggcacat agtcaccttc
tetggaetee etgetteeat gettteteet teagteeatt eegeaaaete ttgtgatett
                                                                     2100
ccaaaattag ctctgattag ctttcacttc ctgtagaagc aagaacaagc tcctctgctt
                                                                     2160
ggtacttagt ctgtgtccat gtgatccaaa attaccttcc tattgcattt cctactcctt
                                                                     2220
tgctacgtgt attggacctc tggccaaatt acaaaagatg tactctttgt tctctaaaac
                                                                     2280
cacactaaag ttttctgact tctttcacac tctttatgat aatcctctgc ctgaaaggct
                                                                     2340
attgccacct gtcaaaatct tcattattct ttgcctcttt cctgagcctc ttgcttgaat
                                                                     2400
gtgatttett tetecetgag acceataagg tteatettat gggacettaa tttgtettge
                                                                     2460
atggacattt gtgattetea tttteteace attaaattae ettggagggt agggetgtgg
                                                                     2520
tttactcctg tctaaacccc tgaagcctaa cacagttcct ggcacacaac aggtgttcaa
                                                                     2580
cagatattgt gctcattcaa taaatattta ctcgctttgt ttaatggatt ccacccctgc
                                                                     2640
                                                                     2700
cttcctaggt gaccttggac aaattctcga acccattcac caaccacaca agtttgttgt
                                                                     2760
gagtcataaa tggataatga atataaatgc gcattgaaaa taaacataaa atgttaccca
                                                                     2771
caaaaaaaa a
```

```
<210> 5129
<211> 2629
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(1278)
<223> similar to gi3169158 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5129
tttegtetgg gaegaggtgg cecagegete agggtgegag gageggtgge tagtgatega
                                                                       60
eegtaaggtg tacaacatca gegagtteae eegeeggeat eeaggggget eeegggteat
                                                                      120
cagecactae geegggeagg atgecaegga tecetttgtg geetteeaea teaacaaggg
                                                                      180
ccttgtgaag aagtatatga actctctcct gattggagaa ctgtctccag agcagcccag
                                                                      240
ctttgagccc accaagaata aagagctgac agatgagttc cgggagctgc gggccacagt
                                                                      300
ggageggatg gggeteatga aggeeaacea tgtettette etgetgtace tgetgeaeat
                                                                      360
ettgetgetg gatggtgeag eetggeteae eetttgggte tttgggaegt eetttttgee
                                                                      420
ettectecte tgtgeggtge tgeteagtge agtteaggee eaggetgget ggetgeagea
                                                                      480
tgactttggg cacctgtcgg tettcagcac etcaaagtgg aaccatetge tacateattt
                                                                      540
tgtgattggc cacctgaagg gggcccccgc cagttggtgg aaccacatgc acttccagca
                                                                      600
ccatgccaag cccaactgct tccgcaaaga cccagacatc aacatgcatc ccttcttctt
                                                                      660
tgccttgggg aagatcctct ctgtggagct tgggaaacag aagaaaaaat atatgccgta
                                                                      720
```

```
caaccaccag cacaaatact tcttcctaat tgggccccca gccttgctgc ctctctactt
                                                                      780
ccagtggtat attttctatt ttgttatcca gcgaaagaag tgggtggact tggcctggat
                                                                      840
                                                                       900
gattaccttc tacgtccgct tcttcctcac ttatgtgcca ctattggggc tgaaagcctt
                                                                      960
cctgggcctt ttcttcatag tcaggttcct ggaaagcaac tggtttgtgt gggtgacaca
gatgaaccat atteccatge acattgatea tgaceggaac atggaetggg tttecaceca
                                                                     1020
getecaggee acatgeaatg tecacaagte tgeetteaat gaetggttea gtggaeacet
                                                                     1080
caacttccag attgagcacc atcttttcc cacgatgcct cgacacaatt accacaaagt
                                                                     1140
ggeteeectg gtgeagteet tgtgtgeeaa geatggeata gagtaceagt ceaageeect
                                                                     1200
getgteagee ttegeegaca teatecacte actaaaggag teagggeage tetggetaga
                                                                     1260
tgcctatett caccaataac aacagccacc ctgcccagtc tggaagaaga ggaggaagac
                                                                     1320
tctggagcca aagcagaggg gagcttgagg gacaatgcca ctatagttta atactcagag
                                                                     1380
ggggttgggt ttggggacat aaagcetetg acteaaacte etceetttta tettetagee
                                                                     1440
acagttctaa gacccaaagt ggggggtgga cacagaagtc cctatgaggg aaggagctgt
                                                                     1500
tggggcaggg gtgtaaatta tttccttttt ctagtttggc acatgcaggt agttggtgaa
                                                                     1560
cagagagaac caggagggta acagaagagg agggacctac tgaacccaga gtcaggaaga
                                                                     1620
gatttaacac taaaattcca ctcatgccgg gcgtggtggc acgcgcctgt aatcccagct
                                                                     1680
                                                                     1740
acccaggagg ctgaggcagg agaatcgctt gaaccgggga ggtggaggtt gcagtgagct
gagatcacgc cattgtactc cagcctgggc gacaaagcaa gactccatct caaaaaataa
                                                                     1800
ataaataaaa aaataaaata aaatggtctg gatttggtca acaccttatt cagtaaatcc
                                                                     1860
ttaatttacc ttgagacata caaagacatt cttttaaaga gctattttct tggtattgca
                                                                     1920
caaaggttaa ttttaaagca atccaggcaa gtaagctcac aaaaagaagt acattcatct
                                                                     1980
aatccattta gcaaatgttg caaatcagct tccaccaata aaacgtagaa atctgtgaaa
                                                                     2040
ctctatcctt cgtgtcagtt ttaacattgt gttgatggca gccatttcag gcagaggtag
                                                                     2100
ccaagttcca tatatatggg gaaggcaaaa agcagaaaaa cattgcagga gacttagcag
                                                                     2160
ttetetgget tetaatgaet atagageaat ttegaatatg agecatgttt etatgeagaa
                                                                     2220
ttcttctttt atgccttaaa cacaaaagag cttgttgctg ccttgggcag atatactgga
                                                                     2280
attgtcctct ttgagettac tttctctttt ctctaaggtc aagtaaaaaa tgtgagacgt
                                                                     2340
tttcatatac cacaaaggta atacagcagg ctggagtcac tctaatcaaa ttaggagcaa
                                                                     2400
ttecettgta aaateeaceg aegeettett teeteeatgt etttgtgatt acatetatta
                                                                     2460
caccactgta aaacatgtgt tgatcctgaa gacgagetet tacgaettga tatgggtatg
                                                                     2520
ttgctgcgac agcaaatatt ttggatagtg ctgcaacaga tatatattct actgtgctca
                                                                     2580
actgggcttc tggtaatcta ttgatatgct ggttgtactt caacttcag
                                                                     2629
```

```
<210> 5130
<211> 2389
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2391)...(1943)
<223> similar to gi5001689 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5130

tttcgtctgt ccgcgttgcc agcaacctgt tttctttttt gaggcccggg ctgcggaggg 60

ggagaagatg gggcgaatgg gagccgctgg attccctgag gacgcggagg gctagccaca 120

gtgtagtccc agacacctt ttcacctgca gcggctggta gtctccgcac cacccgctcc 180

cactcgggtc ttctcccttc ctctgagagc tctgtggga gtgtgaaacc ggagcgggat 240

ggagctggcc tcctggagac actcatctcc aggaagcagg gcaggccaac ctaattccct 300
```

```
agagggccga agagggaaag gaggggccct atgcttggac aggctcctcg cagctcggtt
                                                                      360
ccactttgtc ctccacagct gagaaggtga gctccctggg caagaactgg caccgcttct
                                                                      420
gcctgaaatg tgagcgctgc cacagcatcc tgtcccctgg cgggcatgca gagcacaatg
                                                                      480
ggaggccata ctgccacaag ccatgctatg gggctctctt tggacccagg ggccctcccc
                                                                      540
atatgaagac attcactggg gagacctcgc tgtgccctgg ctgtggggag cccgtctatt
                                                                      600
ttgctgagaa ggtgatgtca ttaggcagaa attggcaccg accgtgtctg aggtgccagc
                                                                      660
gttgccacaa gaccctgact gctgggagtc atgctgagca tgatggagtc ccctactgcc
                                                                      720
acgtcccctg ctacggctac ctgtttggcc ccaaaggtgt gaacattggc gatgtgggct
                                                                      780
gctacatcta tgacccagtg aagataaaat tcaaatgaga cgctcacaaa aaaggtcacc
                                                                      840
                                                                      900
ctaactcagg cctcccatca tgcccctcat ggtccaatgg aagctacaaa aatctccagt
cccatggggg ttggggaagg tgggatcttg ggggcctggg cctaggctcc atggtaggcc
                                                                      960
agagagteta gaetttetet gecaattttt teeettteee atttetatet ggttagggaa
                                                                     1020
cagecegttt tgaagggtat ceteeteetg gecateadaa eecettteee cageacatte
                                                                    1080
tggagettea aggtaeteat aaaaettgtg tttattgaat tteageetet gtggettett
                                                                     1140
caataaaatg ttggctcccc atgccttcaa ctcttctttg ggcatgagac ccagtggttt
                                                                     1200
gggaggatgg ggaatgtggg ggttggggat gaacatgcaa ttgccctgca gggtgccctc
                                                                     1260
ggaggtagca gggccagccc atgagaacaa aaagctctgt tctttttgtc ccttgggcct
                                                                     1320
gggcattggc aagtcctaag caccacaca gtggacaagc atgcccacca agccccattg
                                                                     1380
ggtacccaga agteteatat getaagteet ttetttagge acceatetet aggaggaage
                                                                     1440
aggaagcacc ttatttcagg taacttcatt ttgagcatgg caacagatcc tatggtaagg
                                                                     1500
gecteecaag aggtttteat ttatecattt ggggaggatg aacagaetga ggeceagaga
                                                                     1560
agggaaagcc acatgcccaa ggttcacaca gcaagttaat ggtgaaggtt ttatcagagc
                                                                     1620
ccagggcaga ctcagtggct tcctatccag ggctcttccc acagctcgtc accactgccc
                                                                     1680
caacccaagg ggcaccttta tttacagaat cctccccaac cgtgagaggg gtgcccagca
                                                                     1740
gcccactgca ttctgggaag tcaactgttc ctagaagcca aataatcaag gatggatgag
                                                                     1800
cagagggagc gggtactggc agcaactccg gccctaggca gagggttcga tactcccagc
                                                                     1860
etgagttgca gggcetgcce ttetgetete ceageceetg etgeagaget tetgtggagg
                                                                     1920
geotgeotec actoccaett agttotggae etgetteatg ggeatetett cetectgaag
                                                                     1980
actggttggg geactettte tetecaegte etggatggte tetggeaget gtgeetgeet
                                                                     2040
cgtctctggc agcaggaggg cggtgccggc agccagcagg gcgatccccc cataagtaag
                                                                     2100
ettgggcagt, gacagecaca etceatecag caaggeegee agtggggeea aagageeeee
                                                                     2160
cagccggccc accagtgcag tcagccccat ccctgtctgt ctgagcaccg tagggtacaa
                                                                     2220
ctctgaagtg aacaggtagg cagtggtgaa ggcagcttca gaaaaagctt tccccatcac
                                                                     2280
tgccaggaca gtgctccagg acttcatatc ggaggacact agcagtctag tgccgaacgc
                                                                     2340
cagggccgtg cccagcagtg tcccggcttg cgtgaggcgg cgtcctgcg
                                                                     2389
```

```
<210> 5131
<211> 611
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(569)
<223> similar to gi2887453 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5131
actggctgaa aagttttaaa ggtctaaggg agaatacaat tatctgtgcc agtcccaaag 60
agctgcaagg agtaaatgtg atcgatgcag tgaagaacta cagcatctgt ggcaaaagta 120
```

```
180
ctacagagag gtttgatctg gccagggctc tcccaaagcc gacgtttaag cccaagctcc
                                                                      240
ccaggccgaa gcatgagagc aaaccccctt tgcccccgac ggtgggagcc acagagcccg
geccagagae egatgetgae geegageaea tetettteea taaaateate gegggeageg
                                                                      300
tggcgctttt cctgtccgtg ctcgtcatcc tgctggttat ctacgtgtca tggaagcggt
                                                                      360
accetgegag catgaageag etgeageage geteceteat gegaaggeae aggaaaaaga
                                                                      420
aaagacagtc cctaaagcaa atgactccca gcacccagga attttatgta gattataaac
                                                                      480
ccaccaacac ggagaccagc gagatgctgc tgaatgggac gggaccctgc acctataaca
                                                                      540
aatcgggctc cagggagtgt gagatacctt tatcaatgaa tgtgtcaacc tttctggcat
                                                                      600
acgaccagcc g
                                                                      611
```

```
<210> 5132
<211> 1897
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (159)...(481)
<223> similar to gi3924594 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5132 egtaaegegt caegggegge etggeagetg geggeattga ggeggaegeg tetagaggte 60 cgtctgaccg cggcgtcggg acctggtttc cgggcatgag ctgagagcac cacgccgagg 120 ccacgagtat ttcatagaca ttgatggaag cagaaaccaa aactcttccc ctggagaatg 180 catccatcct ttcagagggc tctctgcagg aaggacaccg attatggatt ggcaacctgg 240 accccaaaat taccgaatac cacctcctca agctcctcca gaagtttggc aaggtaaagc 300 agtttgactt cctcttccac aagtcaggtg ctttggaggg acagcctcga ggctactgtt 360 ttgttaactt tgaaactaag caggaagcag agcaagccat ccagtgtctc aatggcaagt 420 tggccctgtc caagaagctg gtggtgcgat gggcacatgc tcaagtaaag agatatgatc 480 ataacaagaa tgataagatt cttccaatca gtctcgagcc atcctcaagc actgagccta 540 ctcagtctaa cctaagtgtc actgcaaaga taaaagccat tgaagcaaaa ctgaaaatga 600 tggcggaaaa tcctgatgca gagtatccag cagcgcctgt ttattcctac tttaagccac 660 cagataaaaa aaggactact ccatattcta gaacagcatg gaaatctcga agatgatggt 720 tgtgaattac tgtagcagca aaagcaaatt ggtctccaca cctaaaatcg tctgcctgtg 780 tactttgtag atgtgaatgg tactattcaa cggagcacaa tcacatgtta gcatttggta 840 acataatgtt titggatgtt citatggatg titcttccct aaactatgta tggaattgag 900 catcatccag aataaatagc gttgtatccc aaattgtgat ttgaaccctg ggatgctcta 960 attggctggt tggtttggat ttgtaactcc agaaacattc tatagtgttc cagagcaaaa 1020 ggcaaataca caaaatatta tttaaatcag gaaactaaaa atattaacat ctattaaaaa 1080 attgagcatt tttctacgct cgtgtgtctt ttacaacata aagaaaaagt aaaaggcagg 1140 gagggaagtg agagacagat tttaaatcat gttcagaact gttgttccag aatttactac 1200 ggcaatccct ccaactggac tgaaaaagag aaagttcttg gcaaaaagga gctgattctt 1260 tgaacaaatg ttgtagtaat ctgtttaaga attatgctta ttgtttcaaa atcccaacta 1320 ggaaaacatg gtgtatatct taaaattgtt cgtgttgaca aaactagaat caaatttaac 1380 attitatace acaacacaag tictatitgg aaattgaact titatictat agcaaccatt 1440 tttttcaaat ctaaataacc atgccttcta taataacaaa tgttgctatt atcatgggac 1500 ttttaaaatt acatttattg catgggattg tttttatagc atgagaatgt tctgtttgga 1560 attatatcat ggtcagtcta aatagaaaaa gcaaaatttc tttgaaaaacc taaacattgc 1620 tatattggtc actatcaaac atacaatttt ctaataattg tgtagcggtc taagtggaag 1680

```
agattgcatt atcttgtgca ggacgaggag aggacatgca gtgggcacag aaagtcaatg 1740 gaacagatgc cactgtggca ccaagactgt aatgactctg tgtggtaggt agttttaaag 1800 gactgcatgc cttggaaatg attcttcact tggagaacat acttgcctct agatatgttt 1860 gtcactctaa gcatcctgaa tataacaata gagaaag 1897
```

```
<210> 5133
<211> 2219
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (119)...(1132)
<223> similar to gi2894802 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5133 gacagetace tgcattgcca aaagttcaca ttttttgtct agaacacaag atattcatat 60 tttcagacag gtaaccagtc ggggagaggc acatttggag ctgaatgcat ttcgaaggaa 120 gcatgattgt gcactagtca tatctgggga ctctctggag gtttgtctaa agtactacga 180 gcatgaattt gtggagctgg cctgccagtg ccctgccgtg gtttgctgcc gctgctcacc 240 cacccagaag georgeattg tgacactget geageageae acagggagae geacetgege 300 catcggtgat ggaggaaatg atgtcagcat gattcaggca gcagactgtg ggattgggat 360 tgagggaaag gagggtaaac aggeeteget ggeggeegae ttetecatea egeagtteeg 420 gcacatagge aggetgetea tggtgcacgg geggaacage tacaagaggt eggeggcact 480 eggecagtte gteatgeaca ggggeettat cateteeace atgeaggetg tgtttteete 540 agtettetae ttegeateeg teeetttgta teagggette eteatggtgg ggtatgeeae 600 catatacacc atgttcccag tgttcccctt agtgctggac caggacgtga agccagagat 660 ggcgatgete tacceggage tgtacaagga ceteaceaag ggaagateet tgteetteaa 720 aaccttcctc atctgggttt taataagtat ttaccaaggc ggcatcctca tgtatggggc 780 cctggtgctc ttcgagtctg agttcgtcca cgtggtggcc atctccttca ccgcactgat 840 cctgaccgag ctgctgatgg tggcgctgac cgtccgcacg tggcactggc tgatggtggt 900 ggccgatttc ctcagcttag gctgctacgt gtcctcactc gcttttctca atgaatattt 960 tggtataggc aaagtgtctt ttggagcttt cttaaatgtt gcctttatca ccaccgtgac 1020 cttcctgtgg aaagtgtcgg caatcaccgt ggtcagctgc ctcccgctgt atgtcctcaa 1080 ttacctgagg cgcaagetet etecteccag etactgcaag etggeeteet aaggggetgt 1140 gcaccccag cgggctggcc ccagcacctt ctgcccttcc cagcaccttg tgcccttgcc 1200 agtgaacgca gggtttgcca ttgctatcaa gcaatcacca caagaaaggg agggtacgcc 1260 aggcgagccc agggcacaga tgctgagaca gcctctcctt ctcagtgcag ggacgtcacc 1320 cctgccaggc aagcccaggg cacagatgcc aggatggctt ctccctctca gtgcgaggct 1380 tcacccctgc caggcaagcc cagggcatag atgctgagac agcctctccc tctcagtgca 1440 gggacgtcac ccctgcccag gcaagcccca gggtcaacaa gaggcgggac ggcctctcc 1500 ctctcagtgt gaggettcac ccatgcctag gcaagcccca gggcacagat gcccgggatg 1560 gccccctccc tcctaagtgc gggaacgtca cccctgccc aggcaagccc agggcacaga 1620 tgctgcgatg gcctcttcct cttaaagtgt ggggcctccc ccccggcttt tctttctttt 1680 tttgtattgt caaaattgta tttcccatat tgaagcagct tgagtttcta ctgaaaatga 1740 gcccgaatta tttcactatt actgtaaagg gttcatctta ctctggcatt ctgagaatta 1800 gactgaaagt ttaatttotg cagttocoto atattoagat totttotttg atgttataac 1860 acaaagtcat teetaetcaa atgtaataaa attgaggete caeggaggee egtgteeaca 1920 tcagctgcag ctcccgctca gacagacggc ctgccccaca gcctgccctt tgctgaaaat 1980

```
accetegett tataettgea tttegetttt cagtaaaaac agteaagtta etgagttete 2040 acataaagag etetteteac acaceetaaa ggeaagttge gtaaacagtg gegttteega 2100 acgeaattee attgeggeea ecaatgtaaa teattgeea gagaetttge tgetageacg 2160 egtgteette ecateettt tetatttgea aaateacact egaacaceat ttetatata 2219
```

```
<210> 5134
<211> 1644
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (740)...(1292)
<223> similar to gi3874826 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5134 gtagecggee egaaagtage gtggaeetge geggggegge eetggegeae ggeegeeaee 60 tgtccagccg ccgcaacgtc ctgcacatcc gcacgatccc tggccacgag ttcctgctgc 120 agtoggacca ogagacagag otgogagoot ggoacogogo gotgoggact gtoatogago 180 ggctggatcg ggagaacccc ctggagctgc gtctgtcggg ctctggaccc gcggagctga 240 gcgccgggga ggacgaagaa gaggagtcgg agctggtgtc caagccgctg ctgcgcctca 300 gcagccgccg gagctccatt cgggggcccg aaggcaccga gcagaaccgc gtgcgcaaca 360 aactaaageg geteategeg aagagaeege eettacaaag eetgeaggag eggggtetge 420 tccgaggtga gggggctggg ccaggttcat ggataagaaa actccagcga ggctcagagt 480 agagettece agaactagae cacaacette tgtgaetget gettteceae taccecagat 540 tgtttagggg agaagetggg gtgaeetgta eeeetttgee agattgtttg aageagggga 600 agggaggtgg agtgtatttc cttgcccagg cctggcacag gcagccagga ggaccagcct 660 cacttaagga taaagaccta tgctgagaag agctcctgtg agtgacgctg gcactggctt 720, cocgecteae tetacttece cagaccaggi giteggetge cagitiggaat cactetgeca 780 gcgggaagga gacacggtgc ccagcttttt gcggctctgc attgctgctg tggataaaag 840 aggtctagat gtggatggca tttatcgggt gagcgggaac ttggcagtgg tccagaagct 900 tegetttetg gtggacagag agegtgeggt caeeteegat gggaggtatg tgtteecaga 960 acagccagga caagaaggtc ggttagattt ggacagtact gagtgggatg acattcatgt 1020 ggtcaccgga gccctgaagc tttttctccg ggagctgccc cagcctctgg tgccaccact 1080 gctgctgccc catttccgtg ctgcccttgc actctccgaa tcagagcagt gcctctctca 1140 gatacaagaa ttaatagget caatgecaaa geecaaceat gacaetetae ggtaceteet 1200 ggagcattta tgcagggtga tagcacactc agataagaat cgcatgacac cccacaacct 1260 gggaattgtg tttggaccaa ccctgtttcg gccagagcag gagacatctg acccagcagc 1320 ccatgetete tacccaggge agetggteca getgatgete accaacttea ccageetett 1380 eccetgatge agggaaggaa gaagagaaaa catattteeg gteatetetg gtggtgagag 1440 gctggtgttc tgttttgagg atatcccttt aaatctccca aatgactgtc tctatcttca 1500 tgagtgtgac ttgaggtgtt gggatgggtg agggagcttc tctaaagagg aaagtgagtg 1560 gattaacccc tgcttctctt cttgttccct gttatcattc ctccccaaca taataataca 1620 taaagtggca tggtaaaaaa aaaa 1644

```
<210> 5135
<211> 3137
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1177)
<223> similar to gi5911890 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5135 gtggcagcca gatatcgggc catacggagg actgctgaac gtggtggtgg acggcctgtt 60 catcateggg tggatgtace tgcetececa tgacececae gtegatgace etatgagatt 120 caagcetetg ttcaggatec acetgatgga gaggaagget gecacagtgg agtgcatgta 180 cggccacaaa gggccccacc acggccacat ccagattgtg aagaaggatg agttctccac 240 caagtgcaac cagacggacc accacaggat gtccggcggg aggcaggagg agtttcggac 300 gtggctgagg gaggaatggg ggcgcacgct ggaggacatc ttccacgagc acatgcagga 360 geteateetg atgaagitea tetacaceag teagtaegae aactgeetga eetacegeeg 420 catchacetg eegeceagee geeeegacga eetcateaag eetggeetet teaaaggtae 480 ctatggcage caeggeetgg agattgtgat geteagette caeggeegge gtgeeagggg 540 caccaagatc acgggcgacc ccaacatccc cgctgggcag cagacagtgg agatcgacct 600 gaggcatcgg atccagctgc ccgacctcga gaaccagcgc aacttcaatg agctctcccg 660 categiectg gaggigegeg agagggigeg ccaggageag caggaaggeg ggcacgagge 720 780 ggcagaggcg cccagcaagg gcccagatgg gacacctggt gaggatggtg gcgagcctgg 840 ggatgccgta gctgcggccg agcagcctgc ccagtgtggg caggggcagc cgttcgtgct 900 gcccgtgggc gtgagctcca ggaatgagga ctacccccga acctgcagga tgtgttttta 960 tggcacaggc ctcategegg gecaeggett caccageeet gaaegeaeee eeggggtett 1020 catectette gatgaggace gettegggtt egtetggetg gagetgaaat cetteageet -1080 gtacageegg gtecaggeea cetteeggaa egeagatgeg eegteeeeac aggeettega 1140 tgagatgete aagaacatte agteeeteac eteetgaceg geeacateet tgeegeeaca 1200 tecegggtgg etetgggget etgaactetg acetgtgaat agaageagea tgeactttgg 1260 aaatooggoo ttttgaccag aacgoacago togtoggggg goocagtoca gocaccooc 1320 agcactttat gtagagaggg tgacatagac ctgcatattt gtcagtgcca tgatggaaga 1380 agctgagcat gtcttaccaa aaacagagag aacgagcctg gatacagcag atgtagggga 1440 cagccgtggg accgcgtgag aattgaagcg gtggggttcc cgcaccctgg gctggctggt 1500 ggttttctcg ggaagcagga ccctcctgac tggtgctctt cctgtgagcg gatagagtga 1560 tagactgggt cgtgtgtgag acgcatgtgc tccaccccac tccttttggg ggaagccagg 1620 caacagtggc ctctgggagg gggtcaggaa gaggcgaaca gctcaggcag cgcaggtgtg 1680 atgggcacag tacgcaaagc aagctcggga agttggtagg atctcaggct tggggccggg 1740 actetggagt gaateceeat ttetetaceg gettgettgg agtttggaca gaageattte 1800 acctetgate teagetteec cacetgtgga gtgggtttag tgacetgagt cactagggaa 1860 tgtcacctga atgcacagcc cagcccatgc acctgcccca gcccctccag ctttggagcc 1920 aaggccatcg ttccagccac ttgactgtcc tcgacggcct gttccagaca gggcgtttgt 1980 tttgtccatg ccttcctccc tgcacgcaca cggcgtcaaa accaagctgc cggccactgt 2040 ctccagaacg caaggctcca ggcccgtgtg tctgaagcag tgagtggtcc acacaggtgc 2100 caggagtgcc catatgagat gacgaggaaa cccctttgca ggtgagggga cagctttcta 2160 gaaaagccac acctgcatct ggggacacac tttggaaagt gggaccctcc agcctggaga 2220 ccccatggac tgatgcctcc actgctgtgt gccccatgtt gtgttaacac ctgcgtgtgg 2280 ggaccccate tgaggtettg getgaggttg geateteetg aagaacagag ageacggtgt 2340 ccagagetgg ccettecece ageccacage cageteegtg ceegagtggg cgtecceage 2400 gageetteee tetetgeege ttgteettgt gtetgggetg etecaagtee ttgtgetggg 2460 caccetggae acgtectget ggtgagggae ctcgggaagg tgacagtetg tgtgccttgg 2520

```
tgtggagacc aacctgagga tgtcctggga aatgttttcc tgatgaattt ctccttgact
                                                                     2580
ggcctttaaa gaacataaga attcccattg cccagcctca gtgcatttgg caaatgctta
                                                                     2640
                                                                     2700
ctttgcttcc cagagtcaga gaattggcaa aggttcctaa atggtaatct ggccggcctg
ggagaaagac tcacgagaaa agccagtgga gaaagcgccc ttccagggcg gcagcagcgg
                                                                     2760
gagecaegea gacecegagg egeacetget ggetettgtg tgtggeceea gtttetageg
                                                                     2820
gettttgeag cattageeta caagetttgt cacteeetge cetetgtggt ggtcaetgtt
                                                                     2880
tttctctctt gccaaatgag gcagtctctg agtgacggtg actgtggcct tgaagcctgg
                                                                     2940
                                                                     3000
aggactgttg ggcatgtaga ctggcacctt gaagattcac cattgtttaa ataaaatcaa
                                                                     3060
gcaaatgett ttttaccaag agcccgagcc tegetetaag ggacgcagte ctagaggcgt
gccctttggg gcttgaagag cacactgtgg gacgcacgtg cttctgatta aaggaatctc
                                                                     3120
agatctcaaa aaaaaaa
                                                                     3137
```

```
<210> 5136
<211> 5330
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(2185)
<223> similar to gi3327078 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 5136 . egeegegggg acegggeagg geteeeegte ggagtgeact gegeeggaea etteaageee 60 tggagggaca ggaaagccag aaatggactt cgtgagactc gctcgactgt tcgccagggc 120 ecgececatg ggactgttca teetgeaaca cetggacece tgtagageca ggtgggcagg 180 aggcagggag gggctgatgc ggccaatgtg ggcgcccttc agcagctcct cctctcagct 240 gcccctcggc caggagcgtc aggaaaacac gggcagcctg ggctctgacc cgagccactc 300 caactccacg gccacgcagg aagaagacga ggaggaggag gagagttttg ggaccctctc 360 tgacaaatac teeteeegga gaetatteeg caaateegea geeeagttee ataacetgeg 420 gtttggggaa cggagagatg agcaaatgga accggagccc aaattatggc gaggccggag 480 aaacaccccg tactggtact tettgeagtg caaacacctg atcaaggaag ggaagetggt 540 tgaageeetg gacetgtttg agaggeagat getgaaggag gagegattge ageeeatgga 600 gagcaactac acggtgctga ttgggggctg cgggcgggtt ggctacctga agaaggcctt 660 caacctctac aaccagatga aaaagcggga cctggagccc tcggacgcca cctacacggc 720 cctgttcaac gtctgtgccg agtccccctg gaaggactca gctctacaga gcgccctgaa 780 geteeggeag cagetgeagg ceaaaaactt egageteaac ttgaaaacat accaegeget 840 gctgaagatg gctgccaagt gcgcagacct taggatgtgc ctcgatgtgt tcaaggaaat 900 catccacaaa gggcacgtgg tcacagagga gaccttcagt ttcctgctca tgggctgcat 960 ccaagacaag aagacagget teeggtaege eeteeaggtg tggeggetga tgetgagtet 1020 agggctacag ccgagccggg acagctacaa cctgctgttg gtggcagctc gggactgtgg 1080 cctaggggac ccccaggtgg cctcagagct gcttctgaag cccagggagg aggcgactgt 1140 1200 ceteatgtea gecatgetge atgtggagge cetggagagg cagetgttte tggaacette 1260 tcaggcactt gggcctccag agcctccgga agccagagtg cccggcaagg cccaaccaga 1320 ggtggatact aaggcagagc ccagccacac agcagccctc accgcagtgg ccctgaagcc 1380 acctecegtg gagetggaag teaaceteet gacceeggg geegtteece etacagtggt 1440 ctcctttgga acggtgacca ccccagctga ccggctggcc ttgatagggg gcctggaggg 1500 cttcctgagc aagatggcag agcacaggca gcagcccgac atcaggaccc tcacgctact 1560

```
ggccgaggtg gtggagtccg ggagtcctgc agagtccttg ctgctggccc tcctggatga
                                                                    1620
gcaccaggta gaggccgacc tgacattctt taacacgctg gtgagaaaga agagcaagct
                                                                    1680
gggagacetg gagggggcca aggcgctgtt gccggtcctg gcaaagaggg gcctcgtccc
                                                                    1740
caacctgcag acattctgca acctggccat cgggtgccac aggccgaagg acggtctaca
                                                                    1800
getteteaca gacatgaaga agteecaggt gaceeccaac acteacatet acagtgeect
                                                                    1860
catcaacgcg gccatcagga agctgaacta cacctatctc atcagcatct tgaaggacat
                                                                    1920
gaagcagaac agggtcccgg tgaacgaagt ggtcatccgc cagctggagt ttgcagccca
                                                                    1980
gtaccetece acetttgace ggtaceaagg gaagaacace tacetggaga agattgacgg
                                                                    2040
ettecgagee tattacaage agtggetgae agtgatgeee geagaggaaa eeeegeaeee
                                                                    2100
ctggcagaag ttccggacca agccccaggg ggaccaggac accggcaagg aggctgatga
                                                                    2160
eggatgtgee ettgggggea ggtgatggga geacagetgg aacaatgtge teggeeceea
                                                                    2220
gtgctctgtg ggagccccag gacaagtgag ctggtgtcac ctcctgcctg ggggaagagc
                                                                    2280
caggccctga ggaacagccg cagcgtgtca caggtgttgg tgaggacaca cactaggccc
                                                                    2340
aaggtgcctg tgctcccagc aggtccaagt gcagctccag ccacctttgc gtgtcacctt
                                                                    2400
cacgggactt ccagctccag ctacctttgt gtgtcacctc acacaccaca agggggctgg
                                                                    2460
ggcatctggt ccctggggcc tgggccgccc cgccgggttc cataggccga tgctctgaaa
                                                                    2520
2580
cagogaagee ttecccatag agacegtget ccaacteggg cetggggeac tgetegetge
                                                                    2640
teccaggaag ggggtggegt gacaggeagg aacetgegaa gtecagagte cagggtggag
                                                                    2700
cgcgccagcc tcagccagag cagccacgac agccacagtg tgtgcactcg atgatgcggc
                                                                    2760
cetgeaacgg aggaggacag tgagacgatg ceactgegee acgetegeee etgeacaete
                                                                    2820
acatatgtgg caacceteee aegaaggade tgecaccatg ceatataggg acacacetea
                                                                    2880
gaaaccette ettgacaget etggacaggg aaaatttgge teeetcatga aggtagaace
                                                                    2940
agetgetgtt gacacegagg ttacatetgt atgtetattt ataatatgtt etgeaaatee
                                                                    3000
aacacacgtt tgccaatcaa gaaaaaaaaa tcggtgtgaa tgagtctcgt tattctgcta
                                                                    3060
agtgagcatg acagaccetg cgatgagcag acgtggetet getactgitt ggggaettea
                                                                    3120
ggggggcctc tgggctggta cactctggtg ggggaagagg gcaggagact atgcacttga
                                                                    3180
gtcacaccct totggcccag agccccccag aaagaagggt ottgtccccc aggcctggtg
                                                                    3240
eggeceaaca ettggecage cagaaageee tagaacagtg gettgtgttt attttaettt
                                                                    3300
ttcaagttct ttttttggaa gaacaagacc atagtttaag taaacaggat cctctggtga
                                                                    3360
aacccaggta agtctacagc gggctgtttt ggccacaggg ctgaagcagc accccagccc
                                                                    3420
accageceet gacetggaet cettgtggaa tetgggeaet cagaggaagg gggettetge
                                                                    3480
cactetgeca cetgtecetg cetecateag aaaaccaaca ceceagtett cegteggga
                                                                    3540
ggcggccctt gctcgccccc actgctcagt acccaagtcc tcagcatcca gccacagctc
                                                                    3600
tccattgtca gtctcactgc agcataaagg ggactcatgt gaagaggccc ctgtgtggag
                                                                    3660
ctggggaaaa gaaggccagg ctggcagatg ggcggtgggg ccaacaactg tgctgagggg
                                                                    3720
ctgcactgag cggccactgc tgtgactctg cctcgggcca cagctgcctt tcagaggggc
                                                                    3780
ttggaaccgg atggagetea geteetgtee etcageacca etcetgagge geetggeeta
                                                                    3840
ggagtggtac ttggaacaga aagttctgaa agaagaaaca cagtgggctg ggcgcagtag
                                                                    3900
ctcatgcctg taatcccggc actttgggag gctgaggcgg gtggatcacc tgaggtcggg
                                                                    3960
agttegagae cageetgage aacattgaga aacceegtet etaetaaaaa tacaaaatta
                                                                    4020
gccaggcgtg gtggtgcatg cctgtagtcc cagctactca ggaggatgag gcaggagaac
                                                                    4080
cgcttgaacc cgggaggtgg aggttgcagt gagccaagat ggcatcactg cactccagcc
                                                                    4140 -/
tgggcgacaa agcaagactc cgtcttgggg gggcgggaaa gatagtgatg gtaatgttaa
                                                                    4200
agtatcactg tgaggactga aagggacagg aactcactgg ttgtccttcc ctgatgtcac
                                                                    4260
cctgccacca ccttgggatt agggctcccc accaccattt cctaagtgag gaaaggggtt
                                                                    4320
cagtaatttg cccaaaagtg gagttgagat tgaccccaga cctaacaaac acacagccac
                                                                    4380
acgctgcctc acatggattc ctgaatacag ggacccactc ccacgaggga gagccagcag
                                                                    4440
gacatccagg gacaaaacga cattccagcc caaccaaata acataagatc ccttgcagtc
                                                                    4500
gactaaggca gaattttgag ctgaaaacaa caccaagctt gagtgtcaga cattaccact
                                                                    4560
tccagcttgc ttttgggcac gcggcagatg cagttcgtcc cgaagttggt gtcccgtgtc
                                                                    4620
tgaatgcacc gcaggcagca caagttctca tatccttgct ttttccattt tqcaatcaqq
                                                                    4680
tttttgtctg catagccttc tttaatacaa tattcataga gttctctgct gatggctttc
                                                                    4740
cgcttgtaaa agaggtgcga agatgtagcc ggggttttct gggtgggtgg atccctgaaa
                                                                    4800
gatgggccac agagattcca ctttccttct tcctttcatg cggttctgtt tcagcttctc
                                                                    4860
tcatcttttg atctaattca tccagtgttg gctcaatcaa ctccccagcc catctggggg
                                                                    4920
tggctttccg gcttcttttg actttaggca ttctccttcc acagataatc tgcaaagatc
                                                                    4980
```

```
ttaggatgtg ctttccaaga gtatagacag cagaaagatc tctcgtctct gcagttgcag 5040 ttgcaggctt ggattcttgt tcagctctaa aaaaattatt cagtgacttt caggtcacct 5100 tccctctctg gttctgtttc ttcagaggaa acggcgcgag aatcctagag gaaaaacccc 5160 caaatctacc gtcccctcag aagaacgaac gtgcgccgcc tcctctcggg agctctctcc ggcctcaagg tccaaagccc gaacacatcc cagtggctgg ctgagagtcc agccactcat 5280 atctccctcc aggacggtgc agaccaccgg tctcccgcct cagggaattc 5330
```

```
<210> 5137
<211> 720
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (527)...(215)
<223> similar to gi2477514 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5137
tttttcccaa agggattaaa ttggggaccc cccgggtttt ccccccccc ccgttttaaa
                                                                      60
aacceggece eggaatttaa ttttggggee eeaaaaaaa aattttacet teeceaecee
                                                                     120
cgggaataaa aattggtccc ctaaaaaggc ccccccttt ttttttttt ggagctgggg
                                                                     180
gatgtttact ggtgtggggg gacctgggaa catcactgtc gttcgtacat ctctcgtagg
                                                                     240
atcttcatgc tttctgagta acgaagctgg ttccgatgag aggcctcctt ccacctctgg
                                                                     300
eggatgegtt tecagegetg catgttgega tagatgagtg tggagggtga gggeteggge
                                                                     360
teagaggget categteagg ggtgeeetge ateteagget geagtggaga tgggatgegg
                                                                     420 '
gatetgeagg cateteeggg tggeeeeggg ggtgtgggtg geggeagett gtacacatea
                                                                     480
egactettge tgttggttae etetgagece tggggacaca agggeeccat gecaggeeca
                                                                     540
agagagtcaa agcagaggg ctgggaatcc acattcatcc ctcctgcctt tcccagcaac
                                                                     600
aaatggcatg aggggctcgc taagggactc agacaggagg catgtatgaa gggcagacac
                                                                     660
ctcaaccage cagegggtea agtgtgcetg ceccagggae cectgtette tectatecag
                                                                     720
```

```
<210> 5138
<211> 1034
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(583)
<223> similar to gi6002805 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5138
                                                                       60
gaagtgeggg gaattegeag gggeteteat tgetgaette ttgtetggee tggtaeaetg
                                                                      120
gggtgctgac acatggggct ctgtggagct gcccattgtg gggaaggctt tcatccgacc
                                                                      180
cttccgggag caccacattg acccgacage tatcacacgg cacgacttca tcgagaccaa
                                                                      240
eggggacaac tgcetggtga caetgetgee getgetaaac atggeetaca agtteegcae
                                                                      300
ccacagecet gaagecetgg ageagetata eccetgggag tgettegtet tetgeetgat
                                                                      360
catcttegge acetteacea accagateca caagtggteg cacaegtact ttgggetgee
acgctgggtc accetectgc aggactggca tgtcatectg ccacgtaaac accategcat
                                                                      420
ccaccacgtc tcaccccacg agacctactt ctgcatcacc acaggctggc tcaactaccc
                                                                      480
tetggagaag ataggettet ggegaegeet ggaggaeete ateeagggee tgaegggega
                                                                      540
gaagectegg geagatgaca tgaaatggge ceagaagate aaataactte teegageetg
                                                                      600
ctacctggtt gccaaccttc cctagcccc aaaccgaagc catctgccaa attccagcct
                                                                      660
ctttgagctg gcccctccag atggagagga catctcctgg gctgggccca ggtaccccag
                                                                      720
cccacccctc atgacacaga atacttgagc cactgatttt tcatttcttt ttttttttt
                                                                      780
tettgggeee ttettaacce eetggggtgg ttttttttgga aacetggatt ttgccaccet
                                                                      840
ccctgggaaa aaggggggtt aacccattcc ttgacccctg gcggcccttg ccccgtgggg
                                                                      900
aaccetttaa ggggggttge etttgggeee aaaaattgee ettttteett etttgttgge
                                                                      960
ccccaggggt tgggggagcc cccaggcccc cttaagggtg ggggagcttt gttttgccac
                                                                     1020
accettgett atge
                                                                     1034
```

```
<210> 5139
<211> 997
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (985)...(582)
<223> similar to gi4062856 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5139
cgttctctcc tgcagggaaa gctcacaact cctcacagcg atctggtatc ttgagcgtca
                                                                       60
gtttctggcc gaaactgggg gctcctgact gaactccctc ccacctagaa aaccttctgt
                                                                      120
gcagtctgat tgctccaaca cccacagagc aggattcagg tatcccggag accttgggag
                                                                      180
gtccccatcc agaggtctgc tgtcctgcca ggcttggggc agcagggact gggaccccac
                                                                      240
teagacetet etggggeaaa tgttttggtt etcacaacag ceetagtgaa atcaateeta
                                                                      300
gatacteeca tttggteeca ecaaggeeat ttaatttete tgtaaagggt aagatgaeae
                                                                      360
aaaagagcca actatggaaa cggtgaggtg ggagtctgaa ccgatttagc tgttctcagg
                                                                      420
gegeacaggg tgttgaeggt ggtttteate tgeeacetge etecttgaga eccagetgge
                                                                      480
ctgagtgtgc acgaaatggg accttctcct tgggtccacc aggctgggag gcacccctag
                                                                      540
gtaccegget ceteateaca geggeageee teteggttee acatetggtt eteetgaega
                                                                      600
agccgctggt tttcggtccg gagcctctgg acctcggcag ccagctcctc cacctggcgg
                                                                      660
caggactgct ggccggtgca cgcctgcagc tgctgcagcc tcctagtctc ctcctccgcc
                                                                      720
tgcgacagec gettetecag etceaggtag tetegeacea geteetgett getgeggeee
                                                                      780
tgcaggctct cggtgtggaa gcgttcgtaa gtctcagaga agtccttccg ctggaactca
                                                                      840
ccgtgcgctc ggccccgccc atcactgtcc ccggcctcac tctccccact ggaacctggg
                                                                      900
tgggagatcc catggggcac atccaagttg ggctcctccg ggtccctgtc attcatcagg
                                                                      960
aactgggtgg tgttgtaggg aattccacca cactgga
                                                                      997
```

```
<210> 5140
<211> 2742
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3) ... (1005)
<223> similar to gi1928886 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5140
taaaatatag tggcgtgcat tttaattctc agtccatagc tcctaccata gaacagattg
                                                                       60
accagtettt tggegeaace cateetggag tgtacaacte egetgageag etetteeate
                                                                      120
teaactteag aggaetgiet tietetitie agitagaete aiggaetgag geteeaaagi
                                                                      180
atgageceaa ttttgeeeat ggeetggett eteteeagat acceeatgga geaactgtaa
                                                                      240
aacgaatgta catctacagt ggcaacagcc tgcaggatac caaggctccc atgatgcctc
                                                                      300
tgagctgttt cctgggcaat gtctatgctg agagtgtaga tgttcttcga gatggaactg
                                                                      360
gacctgcagg tttacgactt cgcctacttg ctgcaggttg tggacctggc ctattagcag
                                                                      420
atgccaagat gcgggtattt gaacgttcag tgtattttgg tgattcctgc caagatgttc
                                                                      480
ttagcatgct tggctctcca cacaaagtct tctataaatc agaagacaag atgaaaattc
                                                                      540
attotoctto cootcataaa caagttocat ogaagtgtaa tgactacttt tttaactact
                                                                      600
tcactcttgg agtggacatc ctctttgatg cgaatacaca caaagtgaag aagtttgttc
                                                                      660
tacacaccaa ttaccctggg cattataatt tcaacattta tcatcgctgt gagttcaaga
                                                                      720
teccaetage cataaagaaa gaaaaegeag atggteagae agaaacatge aegaeetaca
                                                                      780
gcaagtggga caacatccag gagctcctgg gccaccctgt ggagaagcct gttgtcctgc
                                                                      840
acaggiette etececaaac aacaccaace cattiggite cacatteige titiggiette
                                                                      900
agegaatgat ctttgaggtc atgcagaaca accacattgc ctcggtgacc ctgtatggcc
                                                                      960
ccccaggcc tggtagccac ctgagaacag cggaactccc ctagggacac caccacccat
                                                                     1020
gcccctctgt cccgtggaac tgtgcatcac atcctgctca gtgggcctct gtaccaccct
                                                                     1080
gtgggttttc ttggacacct ggccagtgct gaagggctgt tgtgatgttc tgaggttggg
                                                                     1140
ctcaggetgg gtgctctgcc atgggctgag tggcccagat attcttctgt ccatctttgg
                                                                     1200
cetgetggtg ceageagggg acacagactg caaagagaag cacaaagttt gageettgat
                                                                     1260
tectggacee aggagetete aactaacaag gaggeaggag aggteaacee ttgteecatg
                                                                     1320
cacattggga agacttgggg ctctttctgt gactgaggac acaggcaccc aggataagga
                                                                     1380
caaggteetg cetttggete cacattgeca catgaceett aaggeaagea ggtagegtgt
                                                                     1440
ccatagiact tggttgcgac atttgcacta catccacttt agttacttga tgagctggct
                                                                     1500
gtggccaggg tggcccacct gcccttccct gttcctttct tgcacgcgct ccctgcctgg
                                                                     1560
                                                                     1620
gcacaccaaa ctggttgaaa cacagettte taccatecag gtacatgeec aggeetggtt
ctcaccctg ttggagtcag ctttcaagat tgcctgtgcc cctgctctgc cccatcctgg
                                                                     1680
ctggcagggc tgcatgtttc catcctgttt gcctctttta tttaatgcca aagttttagc
                                                                     1740
caaagacatc ttcctacttt tgttgtgttt cagcattctg ttctgcactg tgggctggct
                                                                     1800
ctctgcccca accetgggca ctggcccctg gctgggccat ttcatggctc aaagcctctg
                                                                     1860
ggggeteaag gaaggetggg etgeteagte eetteatggg tettgetaat ggaaagtage
                                                                     1920
atatatgtgc tttaaaaata ttaatccttt tgaaaagaac tgagaagaaa aatgtataat
                                                                     1980
tttatcccat ttttaatatt ttggtctagc aacttgtgat acatagatga caattttgtg
                                                                     2040
agtttttcaa atgtgtgtac agatttttgt aaatatgact cttttgtaat taactcatgt
                                                                     2100
acageeteat eetgtatagt ttaatgatga atgtgeaggg gaeetgtete aggeteetat
                                                                     2160
atggttcctg ggccttatag ccaggtttgt gtggcgctcc cgacttttgt gactgactgg
                                                                     2220
tgtcttccca tttggactgt ggcctggcca gagccccttg catatcccca ctgtcagggg
                                                                     2280
```

```
cagccaggac tgttcccatc ctcctggaat gggggaacct tccttatccc ctgcccacat
                                                                     2340
                                                                     2400
cccctctcca ataaagcacc tgtgccctca gcaatggcct gccatgtgct gttgctggga
tgtttgtatt aaggtaagtg tgggtattgg ttttgcgccg ggtcccgcgg cgccaggaac
                                                                     2460
tccaggagat ttcccacgtt cacgaacaca tctgcgtcgc ccttaaaaac gaagcgcacg
                                                                     2520
teggggeaga aagetgagge eeaggetaga aagtggatet eettgagegt taggttaaaa
                                                                     2580
aaggtgtegt egaaggeeea gageaggatg teegeataeg caaggetete ggeeegeage
                                                                     2640
agggcgcgcc agtgggttcg cgcgccctcc ccaacttcgt cggcctcggg gatgtagtac
                                                                     2700
ttgatagece gegtgeggat gggeegegea tgeacaatta eg
                                                                     2742
```

```
<210> 5141
<211> 2867
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2868)...(847)
<223> similar to gi556299 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<400> 5141 ttttttttt ttaaaaatat tcagaaccaa gttttatttt gtagtcgtta cacaggaggg 60 ggcagtcaga agagtacagc tcaccccag cagtggaggg gttaaatctc agggacaacg 120 tggggcagtg gggacagcac ctccgaccct atggggtgta ccttcaagta gcaaggctga 180 caatgatgtc tagaaaggtc tccacttctg cctgagtttt gccaaaccca gtggtctata 240 gggatgtggc aaaagaatga cctaccgcag tgtgattatc agtgtttttt aaaataaaga 300 gcacagtttt gcctttaaaa taattcacat caacggtatt tgggagaaca tggagctggc 360 ataacattgg cgtagaaagc agggccaggc ccacccacgg ggccctcgtg tggggacggg 420 tgcctgagcc cctgagcccc tcgagcctct ggccacggct ggctgcctgt gtgctgttgt / 480 ctcgtctgtc ccaccccgag aagggagttg aacaatgtga gttgtctgtg gcattggaaa 540 gtgcagtggt tacatgggtg tgtgcgaagt ggttagctgt gccttcaggc ggtgcgtcta 600 gcagggctga tgggggccag ggctgctcct ggctttttgt gggcagggct tgccctccag 660 ggaccccgag tgcttgcacc cgctcggtga cagtggctgg caggtctaag tgctgctgct 720 ggatgcaaat teetttggta gaettttttt tttttaagaa aaaaataaaa ccaatttttg 780 ggttggcacc tgaggtaata agttaagaat aagcaccaaa atggcccttc ctggcacgcg 840 ccggctcaca ggttcttcat gcacacctgg cagcggctga tgtgtgtgcg gatgaggccg 900 geettgageg tgteggegga gggegageee tggaagetet getegggaat ggtggteage 960 cagaagetgt acttgttggc gtagtagtgg caggtgccgc ggcctccatt gcattcgatg 1020 aatggtgtgg cgcggaagtc ctctagacag ctgcccggtg acaccagtga ttggccaccg 1080 cettegtete eegeegeegt gtgcatgagg aaggaatate egatecacaa aeteegeeae 1140 ccagctgggc agtgtgggat ggagacatcc tgactgtgga ccgcgatggc gatggccggg 1200 geeteacae cagaacageg getgatgtag ggettgatet egteetegge caegggeate 1260 atgggcagcg gcgcagtggt agagagccag taggacttgt cgttccggct ggcatagtag 1320 cagacateae cagggttgea gtacaggaag ggcatggtge tgaacegege caggeaggag 1380 ecegocagee ceaggteetg gttgtgegee tteteetgge cetegaagta cageaggetg 1440 tatecactee agagttigtt catgeceace gggcacatgg geteetggte eqtetqqetq 1500 tgcttcacca ggaggtagec gatgetgaeg etgeggeetg geataceegg eaggeeeggg 1560 ctccctggac ggcctggtgc accttcttgg ccaatcggcc cctggtggcc tatgggtcct 1620 teateteece ggaageeggg aacageagae acaceacete tteettgggg eccagettte 1680 cctggagccc cacgaaaacc tggttctccg ggggggccct ggggccccat ctcccccggt 1740

```
1800
gccccagggg ggcctcgcct cccctgggga cccactgtcc ctggttggac ggcaatcttc
                                                                     1860
tgggggattc ctgcaatccc gggggctccc acagtcccgg gggcaccagg gaatcctggg
totocottgg gtocottggg gcotctgtog cocaccgccc eggtgggtoc agtgttoccc
                                                                     1920
atgaageett gtteaceett gggeeetttt teteetggga gaeeaaacae aecaggeetg
                                                                     1980
ccctggggcc cggagtcccc ggcccatcct ttggtccctg gggttcctgg agctcctggg
                                                                     2040
ttccctgtgt cacctttgct tccaggaaga gcagcagaac ctggtggccc tggtgggccc
                                                                     2100
cgataacctt tcaggccaaa tatccctggc gcccctttgt caccaggtgc cccagagatg
                                                                     2160
ttggaagggg gtgtgatgcc tgggaacccc tgaagtcctg ggctcccagg tgggcctcgt
                                                                     2220
teceetggag etecttggte teetttetgt eetgggaete eeacagggee tggaagggtg
                                                                     2280
ttggcctctc ctgggtcacc tctttcccca ggagggcctg ggaagcctgg gtctccgtgg
                                                                     2340
atgtcagaac ctggggatcc tggaaagccc ttggtgcctg gcaagccgtg taagccgcgg
                                                                     2400
atcccacgga gtcccggaaa acctggtaag cccggagetc ccggccagec atcatetect
                                                                     2460
ttgecaceag geagtecaat cegeeceage tetecetgeg accetggagg ceeagteage
                                                                     2520
cctggaaagc ctgtttgtcc tttaagtcca ggagggcctt ggactccagt cacgcctgtt
                                                                     2580
atcccaggga agccgatgtc accttctgtt cccttctctc caaagaatcc cttcagacct
                                                                     2640
ggtattccag tggtgccccg ctcccccttc aggcctggtc ttcctggtaa atttatagtg
                                                                     2700
teccegatgt cacegaaate accagtegeg ccaatetege catacaggee tgetetecet
                                                                     2760
ggggcacett tgtcaceceg getteetatg aateetggga ateeegtaat teeagggggg
                                                                     2820
ccagccaccc cagggaatcc tggcaaaccg gggatgccgg ggaggcc
                                                                     2867
```

```
<210> 5142
<211> 3005
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(1096)
<223> similar to gi2827495 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5142
gtecatette cacegeggee aggagegett cegeattgee agegeetgee tggaegaget
                                                                       60
gagetgegag treetgetgg etggggeegg aggggeeggg geggggeeg egeeeggaee
                                                                      120
gcatctcccc ccacgggggt cggtgcctgg ggatcctgtc cgcatccact gcaacatcac
                                                                      180
ggagtcatac cetgetgtgc ecceeatetg gteggtggag tetgatgace etaacttgge
                                                                      240
tgctgtcttg gagaggctgg tggacataaa gaaagggaat actctgctat tgcagcatct
                                                                      300
gaagaggatc atctccgacc tgtgtaaact ctataacctc cctcagcatc cagatgtgga
                                                                      360
gatgetggat caaccettge cagcagagea gtgcacacag gaagacgtgt ettcagaaga
                                                                      420
tgaagatgag gagatgcctg aggacacaga agacttagat cactatgaaa tgaaagagga
                                                                      480
agagccagct gagggcaaga aatctgaaga tgatggcatt ggaaaagaaa acttggccat
                                                                      540
cctagagaaa attaaaaaga accagaggca agattactta aatggtgcag tgtctggctc
                                                                      600
ggtgcaggcc actgaccggc tgatgaagga gctcagggat atataccgat cacagagttt
                                                                     660
caaaggcgga aactatgcag tcgaactcgt gaatgacagt ctgtatgatt ggaatgtcaa
                                                                      720
actecteaaa gttgaceagg acagegettt geacaaegat etecagatee teaaagagaa
                                                                      780
agaaggagcc gacttcattc tacttaactt ttcctttaaa gataactttc cctttgaccc
                                                                      840
accatttgtc agggttgtgt ctccagtcct ctctggaggg tatgttctgg gcggaggggc
                                                                      900
catctgcatg gaacttctca ccaaacaggg ctggagcagt gcctactcca tagagtcagt
                                                                      960
gatcatgcag atcagtgcca cactggtgaa ggggaaagca cgagtgcagt ttggagccaa
                                                                     1020
caaatctcaa tacagtctga caagagcaca gcagtcctac aagtccttgg tgcagatcca
                                                                     1080
```

```
cgaaaaaaac ggctggtaca cacccccaaa agaagacggc taaccctgga gtatcaccct
                                                                     1140
                                                                     1200
tectecetee ecaggeacea etggaceaat tacetttgaa tgetgtattt ggateteacg
                                                                     1260
ctgcctctgt ggttccctcc ctcatttttc ctggacgtga tagctctgcc tattgcagga
caatgatggc tattctaaac gctaaggaaa aaaaacaaac acagaactgt ttcaagtact
                                                                     1320
caagactgac ttacagacca accaaccacc ttgctggaac ccttgctagc aggcattctt
                                                                     1380
ataaaagaaa ctttcgagcc tccttatatt gctggaaact cagctgtgct ccagactaga
                                                                     1440
gcctccttac ctatgctatg gatttttaat ttattttctc ttatttcatg tacactgctt
                                                                     1500
tttttggtta cagtgtatga tggatgtgta tgaaaaaaat gtatctttgg gaaaacaatt
                                                                     1560
acagtttgtt aatttgaaga tgctggtctt gactcatctt tatttttatt cgcacatccc
                                                                     1620
                                                                     1680
accecatece etgaactact tgggaggtgg gaggggtace agtecacett tgettttggt
agagatgaga ggccgcattt tgctgctaaa gcaagagaaa cttggagctg aagcacacac
                                                                     1740
ctggtctgcc cctagatttc tcctcaaggc ctctggagca accagcacct gcccccttgg
                                                                     1800
                                                                     1860
aatgcagage etggeetgee aaactacaat gtggtagget gaaacgatgg tgttaattet
taggactact tttctagtca cagatgtttt caaatttcta agaaaaagaa aatgaggctc
                                                                     1920
                                                                     1980
aagaggetge ttegtagaat teettttgaa tgaattgagt ggggatgggg acacagtete
                                                                     2040
caagtgtgta tgtggtcttt tctgatctca gctgtgtggc tgcaactctt cgctgttcat
tggttcctct cctggaaagt ggcttctaac cagcactgga tggtgatcat tggtaagctt
                                                                     2100
                                                                     2160
tgctcacctc cctctcttt gcttcatttg gctttatcaa aaagaacaga cctagctctg
aatttgtttg gcttgggaaa ttatggattc tttcaagcca ctcccacaag gtgggtccta
                                                                     2220
ctagaaaggg ttagcatttt aaggggggtt gttctataca cctgtgtcct taccccaggc
                                                                     2280
                                                                     2340
traggaactg cragggaggg aagatgaggt ggggagtrtg tactgagatg gaactgtrag
tgötgtgttg tatgtäcttg ctgttgtaaa agtttgggca tgactttgca tctagcgggt
                                                                     2400
gctgcctgca tctctttgtc tgtaagcttg ctctgggact cagcctctta ggacctacga
                                                                     2460
                                                                     2520
tgccagcagc tctcattaac agtgaaatga cagaggccaa agatggccaa gtgaagaccc
                                                                     2580
aagtotoaga aaacccagac ttgggacaac tgcctgggaa ctaggatgct agagcagttc
tgtaatgctt tgagacacag caattttcac attggccatt ctttcccctc ccctaccccc
                                                                     2640
ttttcttttg agggactttt aatgtttgct gctttaggtg gatggagagt ccaccaggtc
                                                                     2700
ccactcaatt getgetetaa acttetacec acacccacet taattaaggg gtgetaataa
                                                                     2760
aacatgctga ggttgagata aagacgggac ataaggggaa aaattcattc catagagctg
                                                                     2820
aaatctggtt ttcaaggect ctgtggettt cttctgaact taccaccage cetggetgga
                                                                     2880
atgtagattg tgtttttagt aatgtgtact gtgagctgtc ttctgtataa tgtattttgt
                                                                     2940
                                                                     3000
aatgtatttt totoatotao caaaggatga aacaaataaa attatttaaa tagttaaaaa
                                                                     3005
aaaaa
```

```
<210> 5143
<211> 604
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (178)...(250)
<223> similar to gi3845179 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
ttattccagc aatcaaaata attaaaaaca tctcaaatta ttatacacat acaaaatagg 300 tacagagtct tttgcttcct cccacccta gggggaaaaa ctgctttgtg ctttgggaag 360 ttgtctctga aacccgggga cagaggacgc aggacagact aggagggagc cgggaggatg 420 ggctgcagct gtggaggagg gtttcagagg agagaggtcg gagagcagag gcctgagaag 480 ccagaggcag gtggaagag ggtggaaagt gagcagcggg ctgggctgga gccgcacacg 540 ctctcctcc atgttaaata gcacctttag aaaaattcac aagtccccat ccacaaaaaa 600 aaaa
```

```
<210> 5144
<211> 1462
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1438)...(1026)
<223> similar to gi3152703 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5144 ttttttttt ttccaggtca acacgctttt attgccactt ctggctcccc tcgtcccagc 60 aagatteeta eetettaeee tgtaggaata etgageteeg atgeagggga atggggtggg 120 ggtgttacca cttctcctct gcacactgcc aagttaaaga aaaccctgct tgctggagag 180 ggagggccag acagggagga attcaagggc atgtatggct cagtcccact tctgactgca 240 gagtataggg accagggttc caaacttttt ttcgaagtaa gggaggtggg gaagaatttg 300 gctgctgttg taccccgtgt cctagctgcc atgtttccat ggaaatgaag gtggggcagg 360 atgtagetea etetgaetae etgggaggat ggeaggaeag geatttggta aacatatete . 420 ectecactee tacctageae atacggetgt ecceageega ecceeagget etetecteae 480 tgcctgctcc actcccttcc cttctggagc tggtatcatg ccaagtggag tccaggcagg 540 gctgccagtg ctactctcca cagccaggtc tcactggcac gttaggatct aagtatgtcc 600 gccaagetca ggagcatece tgctagaget ggtggtggca gtgcctcggt gaaaaggcag 660 cagcagtace eccaactete tgtgcaactg etgttteeca aacaaaactg aaaacataaa 720 cccaaacact taagggtatc actctggcac aatgctgagg actgggatgg gggagaggag 780 gegeateete etgagaetgg ageeaeetgt geaeeetgee ttetgeeeat etggagtttg 840 ettetteeca etgggetgte aetgggggge tggaateeaa ateteeattt ggtgetgett 900 teageaceca etgetgtteg tttatgagge ttgeeagttt ecatggtgag gaggtgeagg 960 atggattete agtaceatgg gteageeegg tgetgetggt tgtagagetg tagettgate 1020 tgatetttga tetgatteae taggatetgg gaeageagaa tteecaceag etgggggatg 1080 gccaggccta gagccacacc accaagtaag aataggttgc tgtgtatcca gttgaccaac 1140 ttgtcaatac agccattggt gtagatgact ttgctagctt ccaagtagtc aaaggcctgc 1200 ataccttggc cacacatagt gttgatcact gcctggtcag gagtaggcaa gcaacaggag 1260 taaggcacag agcagcgctc tcgactgggg ttgtcttctg agcagttgaa atacatgttc 1320 tgagaccagt cettgtagga aateceteea cageagetaa aetttttetq gecaaaatea 1380 atgaggttet geagateeaa gteatetegg tagtgeaeaa tggeattgtt gatgatetea 1440 ctcactttcc ctcgacccgg ga 1462

```
<210> 5145
<211> 834
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(575)
<223> similar to gi3721617 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5145 60 gaatteeegg gtegagggee agetetgega cetggaceee agtgeteaet tetaegggea 120 ctgcggcgag cagcttgagt gccggctgga cacaggcggc gacctgagcc gcggagaggt 180 geoggaacet etgtgtgeet gtegttegea gagteegete tgegggteeg aeggteacae 240 ctactoccaq atotgocgoc tgcaggaggo ggcccgcgct cggcccgatg ccaacctcac tgtggcacac ccggggccct gcgaatcggg gccccagatc gtgtcacatc catatgacac 300 360 ttggaatgtg acagggcagg atgtgatctt tggctgtgaa gtgtttgcct accccatggc 420 ctccatcgag tggaggaagg atggettgga catccagetg ccaggggatg acccccacat ctctgtgcag tttaggggtg gaccccagag gtttgaggtg actggctggc tgcagatcca 480 540 ggctgtgcgt cccagtgatg agggcactta ccgctgcctt gcccgcaatg ccctgggtca 600 agtggaggee cetgetaget tgacagtget cacacetgae cagetgaact ctacaggeat 660 cccccagctg cgatcactaa acctggttcc tgaggaggag gctgagagtg aagagaatga cgattactac taggtccaga gctctggccc atgggggtgg gtgagcggct atagtgttca 720 780 tecetgetet tgaaagacet ggaaagggag cagggteett categactge ttteatgetg 834 tcagtaggga tgatcatggg aggctatttg actccaaggt agcagtgtgg tagg

```
<210> 5146
<211> 413
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(299)
<223> similar to gi3228237 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5146
gctgtgggtc atcctgctgc cagtccagct gctgcaagcc cagctgctcc cagtccagct 60
gctgtaagcc ctgctgttcc cagtccagct gctgtaagcc ctgctgctgc tcctcaggct 120
gtgggtcatc ctgctgctcc tccagctgct gcaaaccctg ctgttcccag tccagctgct 180
gtaagccctg ctgctgctc tcaggttggg ggtcatcctg ctgccagtcc agctgctgca 240
agccctgctc ctcccagtcc agctgctgtg tcccaatttg ctgccagtgc aagatctgag 300
gctctgccca caaacctcag tgggtcctac agatccggc tctccaggaa tgactgcagc 360
tgtgtcctga attcctgaag cacgtctctg aatctgtcct cctctggact aag
```

```
<210> 5147
<211> 440
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(176)
<223> similar to gi5668703 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400>	5147	•		.•		
cccggacccc	agcaccctca	gcaggcagca	acgcagggtc	tacccccgag	gccccactt	60
cctcaccagc	cacgccagcc	acatcttctc	caacaggggc	ttccagcgcc	cagcagcaac	120
tcatgcagca	gatgatccag	cttttggctg	gaagtggaaa	ctcacaggta	catgaggċag	180
tgggggcagg	tgctgggagc	accactttga	tcctgggagg	tttcaaggga	agcaatagaa	240
tagaggcagt	agggcaagct	tgggagtcag	gtcctgttct	gccacttgct	agccttgggc	300
aggttactga	tgctccctga	gttcagtttg	tgcagatgtg	aaatagagat	gagaagagta	360
atggtactta	cccgtgcact	acatactgtt	ctaaatgctt	tagattttgg	agctcattta	420
cgactcattt	accacattcc			•	•	440

```
<210> 5148
<211> 737
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (412)...(122)
<223> similar to gi4589484 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5148
ttttttttt ttcaagctgg cttttcgtat attgtgtata aaaagatcag attcaggatg
                                                                       60
atttggtggg attgccaggg gctgaccgga gtgttgctgg gaaggagcct cagctccgct
                                                                      120
ccaggtcctc caccaggtag gactgggact cccttagggc ctggaggagc aagtccttgc
                                                                      180
aggtccagtt ccaggctggt gtgaaactga agagcttccg catcttgctt gggttggtgg
                                                                      240
gctcggcccg cactgcctgg tactgctcat ccgtcaggac cttcccgtac agagcatcca
                                                                      300
gcagccactc aacgtttgtg accctcgcga taagcgcagc ccggtgctgg tctataaagt
                                                                      360
gcaggcctgg cttggctgcc gactgaggag gggcctggat cccagctggc gcggctccag
                                                                      420
agecetggtg egtggeegee tgeagetgee eggeeatete etgeaggeee atgtegegea
                                                                      480
gcacgttagc ggtgagctcg gcgccgtagg tctccaggta gaagctgacc agcttgtcgg
                                                                      540
tgaggtccaa ggcgtccatg gacagcagcg cgcccgggg gatgcgcccg tagccctcgc
                                                                      600
```

```
gcagcggcac cgacagcagc ttcagcttga acttcttgag ctcctcggcg gtcaggttct 660 ccagcgcatc caggatggcg tcgcgcgcg gccccatggc tccaggatcc ccggccgctg 720 ccgccgctca ccccgct 737
```

```
<210> 5149
<211> 1741
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(889)
<223> similar to gi1903218 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5149
aggaggtggc cctgagagcc acagcagaga atgagtttgt cgttctaaag aaggacgtgg
                                                                       60
actgtgccta cctgcggaaa tcagacctgg aggccaatgt ggaggccctg gtggaggagt
                                                                      120
ctagetteet gaggegeete tatgaagagg agateegegt tetecaagee cacateteag
                                                                      180
acaccteggt catagteaag atggacaaca geegagaeet gaacatggae tgeateateg
                                                                      240
ctgagatcaa ggctcagtat gacgatgttg ccagccgcag ccgggccgag gctgagtcct
                                                                      300
ggtaccgtag caagtgtgag gagatgaagg ccacggtgat caggcatggg gagaccctgc
                                                                      360
gccgcaccaa ggaggagatc aacgagctga accgcatgat ccagaggctg acggccgaga
                                                                      420
ttgagaatgc caagtgccag cgtgccaagc tggaggctgc tgtggctgag gcagagcagc
                                                                      480
agggtgagge ggeeeteage gatgeeeget geaagetgge tgagetggag ggegeeetge
                                                                      540
agaaggccaa gcaggacatg gcctgcctgc tcaaggagta ccaggaggtg atgaactcca
                                                                      600
agctgggcct ggacatcgag atcgccacct acaggcgcct gctggagggc gaggaacaca
                                                                      660
ggetgtgtga aggtgtgggge tetgtgaatg tetgtgteag eageteeegt ggtggagtet
                                                                      720
cctgtggggg cctctcctac agcaccaccc cagggcgcca gatcacttct ggcccctcag
                                                                      780
ccataggcgg cagcatcacg gtggtggccc ctgactcctg tgccccctgc cagcctcgtt
                                                                      840
cctccagctt cagctgcggg agtagccggt cggtccgctt tgcctagtag agtcatggag
                                                                      900
ccagggcttc ctgccaagca cctgcctgcc tgcatcactg cactgaatgg catgtgaatg
                                                                      960
gaaaatgtgt gettgettee agaatettet ggatgtteet acagagggga agaeetacag
                                                                     1020
agggaaagac cctcgggccg ctcccctgcg ccttttcatg ctagggagat gcatcctagt
                                                                     1080
tgtcctcctg gcagctgttt tcagaggcat tcccagccct tcacttaact cctacttagc
                                                                     1140
tecaaaatae etgtateeaa titgtattat teeceeaget eteagggata agaceagtee
                                                                     1200
eccagegtgg tggtcagcac ggaageteca cettetgggt ggaggegeca tectaaccat
                                                                     1260
ecagecagge cacecacae ecgagaatea gggagaaagt ecetececag cagececete
                                                                     1320
ctcctggctg ggaagaatgg tcccccagca agcacttgcc tgttcattcc cgttcatgtt
                                                                     1380
ttgcttctct ctcagactgc cttcctgctt ctgggctaac ctgttccagc caggctcctc
                                                                     1440
atgtgacete geagttgaga ageceattat egtggggeat cettttgeet acageceetg
                                                                     1500
gttagggcac tttggacagg tcttgctatt cagtgaacct ttgtacattt caaagaagac
                                                                     1560
tecatggetg etceagatge eccettgetg ggtgeaggtg gggaetgtee aatgeagage
                                                                     1620
tggcgggaca gagagttaag ccacttcctg ggtctccttc ttatgactgt ctatgggtgc
                                                                     1680
attgccttct gggttgtctc gatctgtgtt tcaataaatg ccgctgcaat gcaaaaaaa
                                                                     1740
                                                                     1741
```

```
<210> 5150
<211> 1090
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(818)
<223> similar to gi3868802 in the genepept database release 114, \(\gamma\)
Run with FASTXY 3.3t00, default parameters
```

<400> 5150 eccaegegte egaagagtgt agaggetgat gteaatgggt taccaagagt gatggatgaa 60 ataatcctgt gcagaacaga tctggagatt cagtatgaaa ccctgagtga ggagatgact 120 tacctcacaa tgaaccataa agaggaaatg ctggttctgc agtgcgcagc tggaggcaac 180 gtgaacgtgg agatgaacgc agccccggg gtggacctca cagttctgct gaacaacatg 240 cgagctgagt acgaagccct tgcagagcag aaccgcaggg acgcggaggc ctggttcaac 300 gagaagageg cetecetgea geageagate tetgaggatg teggageeac aaceteagee 360 eggaatgage tgactgaaat gaagegeact etteaaacee tggaaattga aetteagtet 420 etectageca egaaacacte eetggagtge teettgacag agacegagag caactactgt 480 gegeagetgg egeagateea ggeteagate ggggeeetgg aggageaget geaceaggte 540 agaaccgaga ccgagggcca gaagctggag tatgagcagc tcctggacat caagctccac 6.00 ctggaaaaag aaattgagac ctactgtctc cttataggag gagatgatgg agcctgtaag 660 tetgggggtt acaagtetaa agattatgga tetggaaatg tgggaagtea agteaaagae 720 ccagccaaag ccatagtggt taagaaagtt cttgaggagg tagaccaacg cagcaaaata 780 cttaccacca ggctccactc cctggaagag aaatctcaaa gcaattaatt tgagatgcaa 840 cagagaacgt atgccacata gcccctgcga agaaaaggca ttatgtatct gtccagaaaa 900 atgtgcatgt cctaagaaaa atgtctaacc tgttgtcttt ctgttacttt ctttctgggc 960 aatcaatgac agcatctccc ccattccatc ttagaagaat gccacacaca aatatgactc 1020 catttggatt atccctacag aaatctgttg tcaattcttt gtattcaata aacctcttct 1080 ttagcaagtt 1090

```
<210> 5151
<211> 514
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (197)...(435)
<223> similar to gi4874315 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5151
tttcgtgggg aagggccca ggcaggctga ggattctagg ggcggggtgg gaaggaggac 60
cggccgaacc ttgggtgtgg gacagagtgc gtgcgtgtgg tgtgtcccca agggcaggaa 120
```

```
ggtggcgaag ggaggcgaat ccgagtggt ggagggaggg gaagggcggg aggagaaaaa 180 ggtgggagga ggaccaggtg ggagggtggc ggctcactca ggacccagcg ggggcagcgc 240 gatgaggcgg gtgaccctgt tcctgaacgg cagccccaag aacggaaagg tggttgctgt 300 atatggaact ttatctgatt tgctttctgt ggccagcagt aaactcggca taaaagccac cagtgtgtat aatgggaaag gtggactgat tgatgatatt gctttgatca gggatgatga 420 tgttttgttt gtttgtgaag gagagccatt tattgatcct cagacagatt ctaagcctcc 480 tgaaggattg tttggattcc acacagagtg gctg
```

```
<210> 5152
<211> 726
<212> DNA
<213> Homo sapiens
.
<220>
<221> misc_feature
<222> (2)...(272)
<223> similar to gi5917706 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5152
ggcctggatc cacaacatca cccacgggtc ggggatcggc aagccaatcg aggccttcca
                                                                       60
                                                                      120
tacttegtet aggaatgege geaaegtete ceaggeetgg egecaegegt tgeeetteae
taagateetg egegtgeagg aggtgtgege eggegegetg eagetgetgg getaeeggee
                                                                      180
tgtgtactct gcggaccage agcgtgacct caccctggat ctggtgctgc cacgaggccc
                                                                      240
agaccacttc agctgggcat cgcctgactg agaactctgg gccttagagc aggccccgaa
                                                                      300
ctgtggtcgc caggcccagg aggcgactgc atggtggaga gggagctggg gcgcatgggg
                                                                      360
aagcaggtcc ctactatcaa ccgggagttt ggggtcctcc cctgaagtag gcaaggactg
                                                                      420
caegittett teteteetga tieteggitt teetitgaat ettetggage tgeettetea
                                                                      480
tcaggtgcac tcttcatgga aagcaactct tgcccctacc tcttctgggc gcagggagta
                                                                      540
agttactgct aaattaaatt aaatgtgtgc caggccgggt gcggtggctc atgcctgtaa
                                                                      600
teccageatt ttgagagget gaggegggtg gateaeetga ggteaggagt tegaaaceag
                                                                      660
                                                                      720
cctggccaac atagtgaaac cccctctcta ctaaaaatgc aaaaattagt ccggcgtggt
ggcacc
                                                                      726
```

```
<210> 5153
<211> 1071
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1003)...(379)

<223> similar to gi538200 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5153
 ttttttttt ttcataactc tggtcactat tttcatccgc atctgtcact tctgatgcgt
                                                                        60
                                                                       120
 ctctaacatt tataagattt ctctggggag ggatttgacg tatccatgcc ccacctcttt
                                                                       180
 ctacatttat gggattgagc tetecaccag ccacccatgg getgatgtet ttggaatatg
 gatctagtac caacagagtc agaaaaagag atggggtcca atgggctaca gttgggtggt
                                                                       240
                                                                       300
 ggtcctggga tacacagcac agtggcctct actgggggat ggcagctttc caggagaaga
 gtcgcaagct tgcctgtggg acttgtgtct tgtggagagg acagggctgc ctcagcttgg
                                                                       360
 ggagacagac agagtgttcc gggtcccctc tttccgccgc agcatgaagt ctctgggggc
                                                                       420
 gactggactc atggcataga agacgttggc attgtcagga atcaggagca cccggtcccc
                                                                       480
 aggaaggact tgaaagagct gatagtcaca ggcccagggc tggggcacat tgtgcttctg
                                                                       540
, caaggetege eggaecaege tgggggettt gteetgaetg gteageaaga tgettegata
                                                                       600
 caggiticecg tggtcattgt cgatgetgac geggatgaca egggeeteeg agetetgetg
                                                                       660
 cgccgggagg gggattcgag ggctgcccag aggcaaagcg aagggccggg ggctgggcag
                                                                       720
 gtecaggete aggggeaget tggtgetggg geeetgggge eetggagagg eegggggaet
                                                                       780
 gecageagga geatetetge ttetaggaet tgagggggt gaccetgggg acacaetgga
                                                                       840
ggtgggggat gaggggtccc cgggactccc actaggtgat gagcttttct ctcgggcaag
                                                                       900
 cttcgcactg agacgcttgg tgaggctgat ccgccgtcgg atgcgtgggg agctggggca
                                                                       960
 ggaggcagct ggtggctcaa tgacccggga gagccggtag ctgaggggtc aatctgtgga
                                                                      1020
 tgaggtggtg ggggcaggaa atacagggga tggagagata agagttggaa t
                                                                      1071
```

```
<210> 5154
<211> 608
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (611)...(339)
<223> similar to gi1613788 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5154
ttttttgctg ctccaggagt ttttattgaa cattctggtg gggttggggtg gggttgggag
                                                                       60
gtgtcctgtc agtcagtcat ccaccaatag cctggggggc cgagactcct gaccccattc
                                                                      120
tgggcccgtc ttttggcctc cctgggcagc gcccagaaca gagggggccg cctgcggggc
                                                                      180
tgagtgggct ttgtatgggg ggcaccatgg aaggctgccc gccacaggac aggccctggg
                                                                      240
ttgagagggc ctgggaaggt gccgccaggc tagaggtcgg gaagggcgcc tgagcagaca
                                                                      300
cgccagcatc cgctgctagg tgctggccag ggctggggcc ttggagcccc gctgcttgtt
                                                                      360
catggcactc aggagetget geacatatga ggtcageagg teatecatet tatageceag
                                                                      420
ggaggteteg cacageagge ggetgecaeg geceaggete eccagegeea tgtggaagta
                                                                      480
ggtgctgccg ctgctccagc tggagatctt ggtgaaggga taggtggtga gcaggtcctt
                                                                      540
ggtcttgggg tggatgagca gaaccccatg tcggttgatg gcgatgagga tgacgtccgg
                                                                      600
gtaggaag
                                                                      608
```

```
<210> 5155
<211> 1205
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(772)
<223> similar to gi6014681 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5155
cggggagece cegggggece egecacegee geegteegee gteacetace eggactggat
                                                                       60
                                                                      120
eggeeagagt tacteegagg tgatgageet caaegageae teeatgeagg egetgteetg
                                                                      180
gegeaagete taettgagee gegeeaaget taaageetee ageeggaeet eggetetget
                                                                      240
ctccggcttc gccatggtgg caatggtgga ggtgcagctg gacgctgacc acgactaccc
                                                                      300
accegggetg ctcatcgcct tcagtgcctg caccacagtg ctggtggctg tgcacctgtt
tgcgctcatg atcagcacct gcatcctgcc caacatcgag gcggtgagca acgtgcacaa
                                                                      360
teteaacteg gteaaggagt ecceecatga gegeatgeac egecacateg agetggeetg
                                                                      420
ggeettetee accepteateg geacgetget ettectaget gaggtggtge tgetetgetg
                                                                      480
ggtcaagttc ttgcccctca agaagcagcc aggccagcca aggcccacca gcaagccccc
                                                                      540
egecagtgge geageageca acgteageae cageggeate acceegggee aggeagetge
                                                                      600
categoeteg accaecatea tggtgeeett eggeetgate tittategtet tegeegteea
                                                                      660
cttctaccgc tcactggtta gccataagac tgaccgacag ttccaggagc tcaacgagct
                                                                      720
                                                                      780
ggcggagttt gcccgcttac aggaccagct ggaccacaga ggggaccacc ccctgacgcc
eggeageeac tatgeetagg eccatgtggt etgggeeett ecagtgettt ggeettaege
                                                                      840
cetteccett gacettgtee tgeeceagee teaeggacag cetgegeagg gggetggget
                                                                      900
tcagcaaggg gcagagcatg gagggaagag gatttttata agagaaattt ctgcactttg
                                                                      960
aaactgteet etaagagaat aageatttee tgttetteea geteeaggte caceteetgt
                                                                    .1020
tgggaggegg tggggggeca aagtggggec acacactege tgtgteeeet etecteeeet
gtgccagtgc cacctgggtg cotoctcotg tootgtccgt ctcaacctcc ctcccgtcca
                                                                     1140
gcattgagtg tgtacatgtg tgtgtgacac ataaatatac tcataaggac acctcaaaaa
                                                                     1200
                                                                     1205
```

```
<210> 5156
<211> 1762
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1763)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (127)...(1067)
<223> similar to gi3874026 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5156
                                                                       60
gcaccctccc ctcacaatcg gcagcataag cacagacgta aacgcaggaa ccaatgcgat
                                                                      120
tttaggttga atttaggaca gcgctggaac ttcactttac ccctcttgcg gtcacacgag
                                                                      180
caaagcgagc tgaattcctt cttgtggacc attaagcgag acccaccatc ttacttcttt
ggcacaatcc atgtcccgta cacccgagtt tgggacttca tccccgacaa ctctaaggag
                                                                      240
gettteetge agágeageat tgtgtaettt gagttggate teacagaece etataceate
                                                                      300
teagetetea ecagetgtea gatgetgeea cagggegaga acetecaaga tgtgeteeee
                                                                      360
                                                                      420
agggacatet actgccgcct caagcgccac ctggagtatg tcaagctcat gatgcccttg
                                                                      480
tggatgaccc cagaccagcg cggcaagggg ctctacgcag actacctctt caatgctatt
gccggaaact gggagcgcaa gaggcctgtc tgggtgatgc tcatggtcaa ctccctgact
                                                                      540
gaagtggaca ttaagtcccg tggagtgcct gtcttagacc tgttccttgc ccaggaggct
                                                                      600
gagcggctga ggaaacagac tggggcagtg gaaaaggtgg aagagcagtg ccatccattg
                                                                      660
aatgggttga acttttcaca ggtcatcttt gctttgaacc agaccctcct gcagcaggaa
                                                                      720
agectgegag caggeagtet teagateece tacaegaegg aggateteat caaacaetat
                                                                      780
aactgegggg accteagete egteateete ageeatgaca geteecaggt teccaatttt
                                                                      840
attaatgcca cgctaccacc tcaggagcgc atcactgctc aggagattga cagctactta
                                                                      900
                                                                      960
cgccgggagc tgatctacaa gcggaatgag agaataggga agcgggtgaa ggcccttttg
gaggagttcc ctgacaaagg cttcttcttt gcctttggag ctggtcattt catgggcaac
                                                                     1020
                                                                     1080
aacacagtgc tggatgtttt geggegtgaa ggetatgagg tagaacaege eeetgetgga
cgacccatcc acaaagggaa gagtaaaaag acctccacac ggcccactct gtccaccatc
                                                                     1140
                                                                     1200
tttgetecaa aagteeetae eetggaagta eeggcaeeag aageegtate eteagggeae
                                                                     1260
tcaacgctgc ctccccttgt gtcccggcct ggaagtgccg acacgcccag tgaggccgaa
                                                                     1320
cagaggttcc ggaagaagcg gaggcggtca cagcggaggc cgcgactccg gcaattcagc
                                                                     1380
gatetgtggg teegeetgga ggagagtgae atagteeege aacteeaggt eeetgteetg
gacaggeaca tetecaetga aetgeggete cetegeegtg ggeatteeca ceacageeag
                                                                     1440
atggtggcca geagtgcctg cetgtetete tggaetectg tgttetgggt getggtgetg
                                                                     1500
                                                                     1560
getttecaaa cagagacace ceteetgtaa egactggaag caccaggeta agaacetgae
ccctcggact tgaagaatgg ccattcctgt actccacatt ctggtctagc cttgttgggc
                                                                     1620
                                                                     1680
ccaatccaga agagactgct cttgaaaaag cggcccagtg ttgattcttc tctttccaag
gaatgtgact ttgggttatc caactttggg ggcaggtgta cagttttgta acataagtga
                                                                     1740
gtgtgntgtg aaaataaatt at
                                                                     1762
```

```
<210> 5157
<211> 1701
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1702)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1653)...(984)
<223> similar to gi4903004 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5157
                                                                       60
tttttttttt ttggctgtgg ttgtaggaac caccetacag cetagaagae tttattaaga
                                                                      120
tettattget tatgeagtta aagagaeact gattgageta eaggttteet gtaeetggte
tcaggtcact ctgtgcagag cttccccagg ctgttgggag ctgggagact gctaggcagg
                                                                      180
ggcaggcccc agagtgggaa gcatggtacc tcctaggagc ctcagagtgg gtagcgggct
                                                                      240
                                                                      300
tcaagacage cetcagggtg aacagagagg tcaggagtgt eggettaage cagggeecag
gggctacatt ccctgagatg agtcaagccc agccctctct ggggtttcca gaacaaaggc
                                                                      360
taggtgtggg gagcagcact gtggagaggg cagggagcat gtctctaggc attgctggaa
                                                                      420
                                                                      480
ctggaggaga ctgtcagagt ggtttgggta atggttgtat aatctgtggc aactgggcct
                                                                      540
tettgeatga aagtggaagg gtgaggatee ettatggaag agteatgeae catggetggg
                                                                      600
ctggactage cagetecagt ggetetgetg ggtgactaaa gtaggeaagg aaagecaett
gttgcccaca ccccactttc atcaactctg ttcatgcagg acaaagcagg gagctgccca
                                                                      660
acaaggatgg ggttatttct caggcctagg tattgatgtt accttaattc tttagtctgg
                                                                      720
aagaacttgg ttgggggtgg gggatggtaa gcatttcctt aaccaaaccc acacttcaca
                                                                      780
                                                                      840
tetectaggg gtacceette atecaceaac etecagagaa taacetgget geceteaett
                                                                      900
ctccagcttt tctcacaagg cacttgttac agggctgctg atgggagagg gaggaaggcc
tgggaggggg atctggtggt ggcgcccaat ctacagggtc cggaatcagg gtggaagttg
                                                                      960
tcagggacta gcggctgcca tagtacaggc gcatggccag gccaatgagc aatgtggcca
                                                                     1020
ggaagaaggc ggctgtgagc tgcagccgta gcaggactgc tgagagcacg gcgttgacca
                                                                     1080
ccagcgagca ggacaccaca aagaggcgtg tgatgctgct gccatgcttc atgacagcag
                                                                     1140
acatgagcag tecatttagt gcctggctca gcaccacgag tgctgcccat cctgagaaac
                                                                     1200
                                                                     1260
cttccaggag gcctgggcca gagccgccgc cagcatgcag acctagattc agaagcacac
caaaagtgta gaggaagagg ttctgaagtg ccaggggcag ccgctgtcgc ttcatgagca
                                                                     1320
                                                                     1380
getetgtgta caetgaegae aageetgaga tgaggeagta cagaatgagg ageageagge
                                                                     1440
ctagcggagt gatatgcagg ggcatggggc tggcagcagc tgctggaggg ggactgggaa
gggtgttccc gggaacttga aggcccctg ctgcatagca ggctcccgca gccatcagca
                                                                     1500
gcagcagcgc taacccctga cgcacagaga ggcggtgccg gaggcagagg cagtagagcc
                                                                     1560
                                                                     1620
cagctgtgct tccaatcttg agattactca gcacctggta ggtgctgggg tccatgtaac
getgaagata gateaceagg ttgttettag egeegeeeg egtgggtega egenggtnet
                                                                     1680
aaggacgtcg agcggggtca g
                                                                     1701
```

```
<210> 5158
<211> 663
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (96)...(219)
<223> similar to gi3327068 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5158
gatttcatct ttcagetgca tcttctgacc ctgttaaaaa gggagtacta acagtggact 60
tctctggagt actaacagtg gacttctct cgtagggtta tgataattca gagagcagtg 120
ttcggaaagc ttgtgtcttc tgcctggtgg ctgttcatgc ggtaattggt gatgaactaa 180
aaccacatct cagtcaactt actggcagta aagtaagtag tgctgctgtg ctttagagat 240
ggtggccata gtacatcttt caaaacttag ttacatgtct gtaacagtaa gcttttatt 300
tggcatttaa taagtcaggc tttgagcatc caacttgccc ttattattc tgttttgtat 360
```

```
tttatcttt tctactctaa catttgttag atgttcactc aggtgaagtc agcagtttgt tgtgggtgatg ggtaggtttc tgtgagagaa aatgcctgca gcttctggtt atttataata 480 gttagctgac tccttaccaa atcccagacc caaatcttta cccctgacca ctgttttatt 540 aagaataaat agactgttgt ggttatatat attaatggat tactgtatat ctctccaaat 600 atagaatact tgcacattta aaaatttttc cccttaagaa ctatgataat caaatatttg tcg
```

```
<210> 5159
<211> 2289
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(266)
<223> similar to gi3879893 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5159 ggccatggtc ttcggagggg tggtgcccta cgtcccgcag tatcgggaca ttcgcaggac 60 gcagaacgcc gacggcttct ccacgtacgt gtgcctggtg ctgttggtgg ccaacatttt 120 geggatacte ttetggtttg gaaggegett tgagteeeeg etgetgtgge agagegeeat 180 catgatectg accatgetge tgatgetgaa getgtgeace gaggteegtg tggeeaacga 240 getcaaegee aggegeeget cetttacage tgeagatage aaggatgaag aagteaaggt 300 tgcccccagg cggtccttcc tggacttcga cccccaccac ttctggcagt ggagcagett 360 eteggactae gtgcagtgeg teetggeett eaegggegtg gegggetaea teaectaeet 420 gtccattgac tccgccctgt ttgtggagac cctgggcttc ctggctgtgc tgaccgaagc 480 catgotgggt gtgccccagc tttaccgcaa ccaccgccac cagtccacgg agggcatgag 540 catcaagatg gtgctcatgt ggaccagtgg tgacgccttc aagacggcct acttcctgct 600 gaagggtgcc cctctgcagt tctccgtgtg cggcctgctg caggtgctgg tggacctggc 660 catectgggg caggectacg cettegeegg ccacececag aageeggege cecaegeegt 720 gcaccccact ggcaccaagg ccctctgaca gtggggagga cgaggatgtg ggaccgccag 780 ccgcgggcac tggtgggccc tgaacctccc cgcggggagg gtgggtaccg tggccctgc 840 aggtgtggca gagatggggc ataggcattg gggtctccat cagcctctgt agggtgtctc 900 agggttgtca gtgggggtgg ggctgggacg ctgtttgtgc tcagcgggga cagccagggt 960 tgatctggcc ccgagggttt tggatgtttt taggatgaca taaaaagcaa gtgttttccc 1020 cattteetet tatgaaacae egtetgagee caaggtacae attgggegge etgeaggaae 1080 ctgctccagg tggacacacg ggccagcagc cgcgaacctt gaagctgggg tgaccgcagg 1140 agaccctgta aggcctgtga gcggagccct cgaccccgtg acaccctggc cagacaccct 1200 gcttggactg gggtggcctc tgctacccag gggtctggca cgggggaggg ctggggcttt 1260 ctctgcctgg tacacacgga aaggcggctg tgcggacgca gggtcaccgt gctccgggtt 1320 ttctgacagt cggtgtttcc tgggcctttg gagtggctgc gaggcctgaa cgccttgtgg 1380 atcogctgtg tocagcccgg ctgagcatcg ccagggctag ctcatgctgc tcttgtcagc 1440 ctctggttct cctcgagtcc ttggggacgt ggcagatgcc agcgaccatc agacaacgtg 1500 gaggecetea tgggeaatgg etgaggggge egggetgagg etgtgeacat geagtetgea 1560 egecactett gggetetget ggeggagate ecetteette tgggtgeaga etgeacetee 1620 ggatgcagtt ttgatgtcca tcttccagga gagagacggt ctcgggtcca gggagtggag 1680 ggggetgeec etgeegtgea ggteetggee gatggegeet taccetgetg ecetgggett 1740 1800 actgcccacc cccgtgtgct ggctccctca cttctggctg cagtgggagc cgccagtctg 1860

```
accettatea cegeacgete tgececeace cegitgeaag aggicacace atgicageag
                                                                     1920
cettgeactg accgeageeg geocceagge etcagagite tggatgette egtgeggete
                                                                     1980
caacaggcat cgtcttccct tccgcaggtg gaggggccgc ttcccgcagg catctgagct
                                                                     2040
                                                                     2100
etgtgeeggg geegtggeea tgggaagatg ttecaegetg ceteeteete gagtttteet
eggaaacact cttgaatgte tgagtgaggg teetgettag etetttggee tgtgagatge
                                                                     2160
tttgaaaatt tttatttttt taagatgaag caagatgtct gtagcggtaa ttgcctcaca
                                                                     2220
                                                                     2280
ttaaactgtc gccgactgca ggcgcagtga ctgctgaaaa aaaacctcgt gccaagcttg
                                                                     2289
gcgtaagcg
```

```
<210> 5160
<211> 957
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (110)...(455)
<223> similar to gi505658 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5160
gaatecaaat ggteeteaca gtgeeaegge eeggggeagg atggeageee etetgeaeet
                                                                      60
tgcacgetgg etggtteact ettaactect tacccagetg aaagtgaatg ggcggetaga
                                                                      120
ccaagaggag tttgcgcgac tgtggaageg ccttgttcac taccagcatg ttttccagaa
                                                                      180
ggttcagaca agccctggag tcctcctgag ctcggacttg tggaaggcca tagagaatac
                                                                      240
agaetteete agagggatet teateageeg tgagetgetg catetggtga eeeteaggta
                                                                      300
cagogacago gtoggcaggg toagottooc cagootggto tgottootga tgoggottga
                                                                      360
agecatggea aagacettee geaacetete taaggatgga aaaggactet acetgacaga
                                                                      420
aatggagtgg atgagcetgg teatgtacaa etgaagcaaa gaggaaagca gacceatgge
                                                                      480
teaggacaag eteceagtga teaeteaaga atetggetet cattetaaga ggetgtgetg
                                                                      540
cccagtatgg tggttgtgat aaatctaaac cagccctgca tgaaacagag tccaagctgt
                                                                      600
ctcccaacag cctgggttcg gtccttggct ggcccaggcc cagttaagcc tgtggccacc
                                                                      660
aagcagetea tetgageact ttgggatgta tteageetae gttgeeetgg aaaaggaage
                                                                      720
aggagatgtc tecetgtggg aaaggagaag agaagttgtc tetgagteec etgteaceag
                                                                      780
ttggattcat ttcttggaag agccagaatg agccactttg accaccctcg ggtgctatgg
                                                                      840
gtgacacaag agetgtecae tgggtgtttg cagaataatt acactatett atgtetggat
                                                                      900
cctgatgatt tcacagctaa atggcaaaaa taaaacatgt ttcccataaa aaaaaaa
                                                                      957
```

```
<210> 5161
<211> 978
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) ... (829)
```

<223> similar to gil335277 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5161
                                                                       60
gaaagccaca aggacgacgc ccacaaggag gaaaccagcc ccaacgtccc ccacctcctc
caggaaagcc acaaggacca ccccacaag gaggaaacca gtcccaaggt ccccacctc
                                                                      120
ctccaggaaa gccagaagga cgacccccac aaggaggcaa ccagtcccaa ggtcccccac
                                                                      180
ctcatccagg aaagccagaa agaccacccc cacaaggagg aaaccagtcc caaggtcccc
                                                                      240
cacctcatec aggaaageca gaaageegae ceeeacaagg aggacaecag teeeaaggte
                                                                      300
                                                                      360
ccccacctac tecaggaaag ceggaaggac cacceccaca aggaggaaac cagteccaac
                                                                      420
gtaccccacc tectecagga aagecagaag gaegaeeeee acaaggagge aaccagteee
aaggtccccc acctcgtcca gaaatgccag aaagaccacc cccacaagga ggcaaccagt
                                                                      480
                                                                      540
cccaccgtcc cccacctcct ccaggaaagc cagaaagacc acccccacaa ggaggcaacc
                                                                      600
agteccaagg tececcaect catecaggaa agecagaagg accaececca caggaaggaa
acaagtcccg aagtgcccga tctcctccag gaaagccaca aggaccaccc caacaagaag
                                                                      660
gcaacaagce teaaggteee ceaceteetg gaaageeaca aggeeeacee eeaceaggag
                                                                      720
                                                                      780
gcaatcccca gcagcctcag gcacctcctg ctggaaagcc ccaggggcca cctccacctc
ctcaaggggg caggccaccc agacctgccc agggacaaca gcctccccag taatctagga
                                                                      840
                                                                      900
ttcaatgaca ggaagtgaat aagaagatat cagtgaattc aaataattca attgctacaa
atgeegtgae attggaacaa gtteateata getetaaett taatataeea ataaaataat
                                                                      960
                                                                      978
cagcttgcaa aaaaaaaa
```

```
<210> 5162
<211> 1868
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1868)...(1032)
<223> similar to gi854328 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5162
ttttttttt ttaacagtaa ttcttcagac tttattaaaa aatgacataa agtgcatctt
                                                                       60
attaaaaaat gtataaaaac cacataaatt cagggcccct gtgctgggca gtgttgatat
                                                                      120
cccttagagt ggaggaaggt gagggatgga gggtgaactg gggactgggg agaggaccag
                                                                      180
ggtgcagtta gttcctcgtg tttgagttca aagatggagc gagggtggat atggtgggaa
                                                                      240
ggggcacacg ggttctcacg caacaacgga ggaaggcagg cgacagtctc ttccctgaat
                                                                      300
tetgagggaa aggegtaeat tgteaegaaa teteteetga getegegetg teetetegtg
                                                                      360
tggccacage etgatacagg etggaaaggt ccaggagttg ggteegagee caggaeetgg
                                                                      420
tgagggeege agtgeeaace tagecetetg gteeetgagg tggtgggaeg aeggeageaa
                                                                      480
caactacatc ctcggctgac tggcaaggca gaacgcacgc agcccaagct ggtcctgaat
                                                                      540
ctgcagtgag acagggcagc cggtggcagc gggataatgt ggaaggtgaa gaggccagtt
                                                                      600
ggtgagggtt tccaactctg tctcagacaa ccactttgga tgcatcccca gcacccttgg
                                                                      660
gaggccatga actggagcag ccgtgtgtgc tgcatgccat gctatctctt ccctctcatt
                                                                      720
ctagtttcac atttggaatt gttttttaaa caaagggctc agtttacata aggagcactg
                                                                      780
```

```
ttocaccaac ctaggcaggc ccccatattt ggccaggacc tctggggcca cggctgtttg
                                                                      840
ggtgtctggg tggtaggagc ttcgctactt gactggagag cagcaggcca gctggcccca
                                                                      900
                                                                      960
aggeteceaa gggeegggea eeaeggtegt gttecaegaa gageagageg gaggggaggt
                                                                     1020
ccaqttgacc ctctccgagc attcacagcc cctgaagcca gggcagcgtc ctctggaagt
caqctctcac accacagagt cacggatctc cgagccaagg cggacccggg gccgggggca
                                                                     1080
                                                                     1140
cactggggat acctccacga agetgtettg gatgetgagt ggeetettet etgaeteagt
                                                                     1200
gaagactcgg gcccccgggg ggctgtctga cagggactgg taccctcggt gatcgagcgg
                                                                     1260
ggtgctaggg ggccctaggc cgttgagtgg gcgggtctca gggggcagca ccacagggca
ggtcttgggg tgcacgctgg cacattecee ctgcttcagg aagactttca tgctgtteeg
                                                                     1320
                                                                     1380
gtgccggtag agcaagaata aaactgggag cagcacggcc agcacaaaga gcgtgcacat
                                                                     1440
caccaggaac teettecagt aggacetgte tgcaccecag etggeettge caccagetgg
                                                                     1500
tgcactcaca cgcgatgtgc tgataatgac gggtacactg ccaccctcat ctgtttggtc
                                                                     1560
tgccaccccg tcctccacca cctctgggca gtagctggct accagctgct ggaagccctc
                                                                     1620
ctctagtgac cagcactgga actcccccag ctgttgggtg cccaccagca gcaggtcccc
                                                                     1680
agtgggtagc acgtggcagg aggccgaggc attgacgggg gccccgttgc gtagccagag
                                                                     1740
tegggtegee aggttggaga ggagegggea ggeeaaagtg tteaetgtgt tgggetggaa
ctggacttgc tcacatggct tctcccctgt tggtacaaaa gacggggaca caaccgaaga
                                                                     1800
cgcgctgcaa aggtccttgg cgctggctcc ctcgatgtcc tggatccacg gcctggtggc
                                                                     1860
                                                                     1868
cagctgag
```

```
<210> 5163
<211> 934
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (937)...(663)
<223> similar to gi485110 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5163
ttttttttt ttagattcag atatttaacg aatagtattg catggtacaa tcatgcaggt
                                                                       60
ttaaaataat agcaattgag tccataggag aagacgacat tcttgcttga caaggtagga
                                                                      120
                                                                      180
acaaattcat tatatttcac caagactaaa attacaaagt ttgggtgtgt aaaggcaaga
                                                                      240
tttaattgtt gggaaaattt atccgagcca gccaccacga caaaagccag gctgaccaaa
tcaaatggat tctttacatc ctccaagttt cagaagaatc ttgaatatgg ttagccagaa
                                                                      300
                                                                      360
gatatggtaa atttgacccc aaacatttgc ttgaaggagt aaggtcttct aatgagtgaa
tgtcaagaga tcagcacata agtaatagct tatttatect ttaggtcaca tccatctgtg
                                                                      420
aatcaagcag cettgeagte cacatggtea geatetetee catggetega ggeteaatga
                                                                      480
                                                                      540
tcaaggttgt ttagccagtc ttagagtata taaaaagcct ctccattttt ttttggttgt
tttagagaga gaatacgcaa gggaattett cacaggagga gacgtagtee taaateeett
                                                                      600
                                                                      660
ctgctttccg ttgcattgga tgtatcactt gttctcttta ataatcattt tttccatcct
                                                                      720
cattcattgt acttggacag ttttaacctg gggatgatgt tcatagactg tagttcctgg
aagagcagct tgcaggcata cggaatacgg agggaagaca cgtggcagga tgacttgcag
                                                                      780
taatggcacc agccagaata ccccagaagt ccacactgcc cacagacatc aacctcaaag
                                                                      840
gcatcacttg aaatcattag tetetetage aaaageatae tggeteeata acegattaaa
                                                                      900
cagtcacgtt ccatttcccc gagacgcaag ccac
                                                                      934
```

```
<210> 5164
<211> 1445
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(798)
<223> similar to gil314373 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5164
atgaagaagg aggtgtgctc cgtggccttc ctcaaggccg tgttcgcaga gttcttggcc
                                                                       60
acceteatet tegtettett tggeetggge teggeeetea agtggeegte ggegetgeet
                                                                      120
accatectge agategeget ggegtttgge etggecatag geacgetgge ecaggeeetg
                                                                      180
                                                                      240
ggaccegtga geggeggaca cateaacece gecateacee tggecetett ggggggcaac
                                                                      300
cagatetege tgeteeggge tttettetae gtggeggeee agetggtggg egecattgee
                                                                      360
ggggctggca tectetaegg tgtggeaecg etcaatgeee ggggeaatet ggeegteaae
                                                                      420
gegeteaaca acaacacac geagggeeag gecatggtgg tggagetgat tetgacette
                                                                      480
cagetggeac tetgeatett egeeteeact gaeteeegee geaceageee tgtgggetee
                                                                      540
ccagecetgt ccattggeet gtetgteace etgggeeace ttgteggaat etaetteact
                                                                      600
ggetgeteca tgaacccage cegetetttt ggecetgegg tggtcatgaa teggtteage
                                                                      660
ccegctcact gggttttctg ggtagggcc atcgtggggg cggtcctggc tgccatcctt
                                                                      720
tacttctacc tgctcttccc caactccctg agcctgagtg agcgtgtggc catcatcaaa
ggcacgtatg agcctgacga ggactgggag gagcagcggg aagagcggaa gaagaccatg
                                                                      780
gagetgaeca ecegetgaec agtgteagge aggggeeage eceteagece etgageeaag
                                                                      840
ggggaaaaga agaaaaagta cctaacacaa gcttcctttt tgcacaaccg gtcctcttgg
                                                                      900
ctgaggagga ggagctggtc accetggetg cacagttaga gaggggagaa ggaacccatg
                                                                      960
atgggactec tggggtaggg gecagggget ggggtetget ggggacaggt etetetggga
                                                                     1020
                                                                     1080
cagaceteag agattgtgaa tgeagtgeea ageteaeagg etgeaaggge eaggeeagaa
aagggtgggc ctgcagcctg cacccccac cttccccaac ccttcctcaa gagctgaagg
                                                                     1140
gateccagee cetaggtggg cagaggeaga ceeteeccag ageteettag gaagaagaea
                                                                     1200
gactggttca ttgaatgccg ccttatttat ttctggtgag gatgcatgcg tggggctgct
                                                                     1260
ggtgtttaga gtgggggcta cccaataaat cactgatact caaaacacca gcagaccetc
                                                                     1320
                                                                     1380
cccagagete ettaggaaga agacagactg gtteattgaa tgeegeetta tttatttetg
gtgaggatgc atgcgtgggg ctgctggtgt ttagagtggg ggctacccaa taaatcactg
                                                                     1440
                                                                     1445
```

```
<210> 5165
<211> 1620
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(1326)
<223> similar to gi4262587 in the genepept database release 114,
```

# Run with FASTXY 3.3t00, default parameters

```
<400> 5165
qqcacqaqcc caaqcaattc aaqacccagc aatactacaa cggcctgaaq cagatctgtc
                                                                    60
cagaagtgga gaatgcccag ccaggggcct tgaagagtca gaggctccca gatctgacca
                                                                   120
cagtcatete ggtggatgee cetttgeegg ggaccetget cetggatgaa gtggtggegg
                                                                   180
ctqqcaqcac acqqcaqcat ctqqaccaqc tccaatacaa ccaqcaqttc ctqtcctqcc
                                                                   240
atgaccccat caacatccag ttcacctcgg ggacaacagg cagccccaag ggggccaccc
                                                                   300
teteccaeta caacattgte aacaacteca acattttagg agagegeetg aaactgeatg
                                                                   360
agaagacacc agagcagttg cggatgatcc tgcccaaccc cctgtaccat tgcctqqqtt
                                                                   420
ccgtggcagg cacaatgatg tgtctgatgt acggtgccac cctcatcctg gcctctccca
                                                                   480
tetteaatgg caagaaggca etggaggcca teagcagaga gagaggcaee tteetgtatg
                                                                   540
gtacccccac gatgttcgtg qacattctga accaqccaqa cttctccaqt tatqacatct
                                                                   600
cgaccatgtg tggaggtgtc attgctgggt cccctgcacc tccagagttg atccgagcca
                                                                   660
tcatcaacaa gataaatatg aaggacctgg tggttgctta tggaaccaca gagaacagtc
                                                                   720
ccgtgacatt cgcgcacttc cctgaggaca ctgtggagca gaaggcagaa aqcqtqqqca
                                                                   780
gaattatgcc tcacacggag gcccggatca tgaacatgga ggcagggacg ctggcaaagc
                                                                   840
tgaacacgcc cggggagctg tgcatccgag ggtactgcgt catgctgggc tactgggtg
                                                                   900
agceteagaa gacagaggaa geagtggate aggacaagtg gtattggaca ggagatgteg.
                                                                   960
ccacaatgaa tgagcagggc ttctgcaaga tcgtgggccg ctctaaggat atgatcatcc
                                                                  1020
ggggtggtga gaacatctac cccgcagagc tcgaggactt ctttcacaca cacccgaagg
                                                                  1080
tgcaggaagt gcaggtggtg ggagtgaagg acgatcggat gggggaagag atttgtgcct
                                                                  1140
gcattcggct gaaggacggg gaggagacca cggtggagga gataaaagct ttctgcaaag
                                                                  1200
ggaagatete teaetteaag atteegaagt acategtgtt tgteaeaae taeeeectea
                                                                  1260
ccatttcagg aaagatccag aaattcaaac ttcgagagca gatggaacga catctaaatc
                                                                  1320
tgtgaataaa gcagcaggcc tgtcctggcc ggttggcttg actctctct qtcaqaatqc
                                                                  1380
aacctggctt tatgcaccta gatgtcccca gcacccagtt ctgagccagg cacatcaaat
                                                                  1440
gteaaggaat tgactgaacg aactaagage teetggatgg gteegggaac tegeetggge
                                                                  1500
acaaggtgcc aaaaggcagg cagectgccc aggccctccc tectqtccat cececacatt
                                                                  1560
1620
```

```
<210> 5166
<211> 711
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(712)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (406)...(226)
<223> similar to gill09915 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5166
aatacattgg cgggcgtagt acttattgtg ctcgtcaaac ttgagttcct gaatgacatc
                                                                       60
tgggtacttg agtagccgca gcaggatctt ctctgatatc atggaggggc taaactgaga
                                                                      120
gacctetgtg getaggaage gatgagegge caggaggage tgeggggaga ttttcacttt
                                                                      180
gageteattg teegeateet tgaaggeaga gaagteaege ttgttettet cagacaceeg
                                                                      240
etteeggett eggttgteag tgtacatgte ggaetegtee aggateteeg aettgatgat
                                                                      300
etectegate aegtecteea gggtgaceag geecaggace tegtagaagg ggteaecete
                                                                      360
                                                                      420
accetegitg ittacetici geacgatgge caggigggae ticecagete cageigetit
ttctcatggg gaaaagccag gggccccaga gcagaccagg gactcccacc acccaagaag
                                                                      480
gagteetetg catettacte aatgagtete ecaggaaggt ecageetetg agateecagg
                                                                      540
ggcccaggat gttcccgcgc tctcaggccc tcccatggga gaggtgcggg caggactgac
                                                                      600
tggaagccac aggettggge caaagtecae acaaacagat agetgagcae eetgatttet
                                                                      660
tgcgnncggg tggntcgncg cnannttngg ngnatgntnc aggaggtcct t
                                                                      711
```

```
<210> 5167
<211> 549
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(395)
<223> similar to gi407139 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5167
cgcctttgta gaaatgagtt ccagcagctt tatgggaata tctaatatga cacaactgga
                                                                       60
aagctcaact agtaaaatgc ttaaagcagg cataagagga attccgccta aaattgaagc
                                                                      120
tettecatet gatateagea ttgatgaagg caaagtteta acagtageet gtgettteae
                                                                      180
gggtgageet accecagaag taacatggte etgtggtgga agaaaaatee acagteaaga
                                                                      240
acaggggagg ttccacattg aaaacacaga tgacctgaca accctgatca tcatggacgt
                                                                      300
acagaaacaa gatggtggac tttataccct gagtttaggg aatgaatttg gatctgactc
                                                                      360
tgccactgtg aatatacata ttcgatccat ttaagagggc ctgtgccctt atactctaca
                                                                      420
ctcattctta acttttcgca aacgtttcac acggactaat ctttctgaac tgtaaatatt
                                                                      480
taaagaaaaa aaaagtagtt ttgtatcaac ctaaatgagt caaagttcaa aaatattcat
                                                                      540
ttcaatctt
                                                                      549
```

```
<210> 5168
<211> 1101
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (247)...(868)
<223> similar to gi5824602 in the genepept database release 114,
```

# Run with FASTXY 3.3t00, default parameters

```
<400> 5168
gaccacgcca agettggcae gaggecagaa eetgaaaagt gteagagegt atetteaget
                                                                       60
ggtgaacttg aaacagaaaa ctatgaaaga gacagcttgc tagcaactgt tccagatgag
                                                                      120
caggattgtg ttactcaaga agtgccagac tcccgccagg cagaaactga agctgaagtg
                                                                      180 ·
aaaaagaaga agaacaagaa gaagaacaaa aaggtgaatg gtctgcctcc tgaaatagct
                                                                      240
getgiteetg agetggeaaa atactgggee eagaggtaca ggeteitete eegittitgat
                                                                      300
                                                                      360
gatgggatta agttggacag agagggctgg ttttcagtta cacccgagaa gattgctgaa
                                                                      420
cacattgctg gccgtgttag tcagtccttc aagtgtgacg ttgtagtaga cgcattctgt
                                                                      480
ggagttggag gaaataccat tcagtttgcc ttaacaggaa tgagagtgat tgccattgat
ategateetg ttaagattge eettgetege aataatgeag aagtttatgg gatageagat
                                                                      540
aagatagagt teatetgtgg agatttettg etgetggett ettttttaaa ggetgatgtt
                                                                      600
gtgttcctca gcccaccttg gggagggcca gactatgcca ctgcagagac ctttgacatt
                                                                      660
agaacaatga tgtctcctga tggctttgaa attttcagac tttctaagaa gatcactaat
                                                                      720
aatattgttt attttcttcc aagaaatgct gatattgacc aggtggcatc cttagctggg
                                                                      780
cctggagggc aagtggaaat agaacagaac ttccttaaca acaaattgaa gacaatcact
                                                                      840
                                                                      900
gcatattttg gtgacctaat tegaagacca geetetgaaa eetaactatg cageagtgeg
aggacaaaag atcatggagt ggtcaaaata ttcagatgag acatttggca tgtcttcctt
                                                                      960
tattcactga tattttctac ccatggtctt atatcaccgt atgaaatgga aacttacagg
                                                                     1020
acttaaatat cagtgaaata ttttgagatc tttgaataat teetttagag gaattataca
                                                                     1080
aaattaatat atatgagtcc t
                                                                     1101
```

```
<210> 5169
<211> 2237
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (63)...(839)
<223> similar to gi3043598 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5169
cgacgcgcgc tgcggacccg gctcgaccca cgcgtacgcg gacgcgtggg cggacgcgtg
                                                                       60
ggcgccagca ttcgctcaag aagtcccgca tggagaatga catggcccag tctctccaca
                                                                      120
gtgacacggc tgatgacact gcccatcgcc ctggcaagag caacctcaag ctgccaaagq
                                                                      180
gcatteteaa gaagaaggtg teageetetg cagaaggggt acaggaggae ceteeggage
                                                                      240
tragereaat coetgegage cragggragg etgececet geteceraag aagggratte
                                                                      300
tcaagaagee eegacagege gagtetgget actaeteete teeegageee agtgaatetg
                                                                      360
gggagctctt ggacgcaggt gacgtgtttg tgagtgggga tcccaaggag cagaagcctc
                                                                      420
cgcaagette agggeteete etecategea aaggeateet caaacteaat ggcaagttet
                                                                      480
cccagacage cttggagete geggeeecea ceaeettegg eteeetggat gaactegeee
                                                                      540
cacctegece cetggecegg gecageegae ceteagggge tgtgagegag gacageatee
                                                                      600
tgtcctctga gtcctttgac cagctggact tgcctgaacg gctcccagag cccccactgc
                                                                      660
ggggctgtgt gtctgtggac aacctcacgg ggcttgagga gcccccctca gagggccctg
                                                                      720
```

```
780
gaagetgeet gaggegetgg eggeaggate etttggggga eagetgettt teeetgaeag
                                                                      840
actgccagga ggtgacagcg acctaccgac aggcactgag ggtctgctca aagctcacct
                                                                      900
gagtggagta ggcattgccc cagcccggtc aggctctcag atgcagctgg ttgcaccccg
                                                                      960
aggggagatg cetteteece caceteecag gacetgeate ceageteaga aggetgagag
ggtttgcagt ggagccctga gcagggctgg atatgggaag taggcaaatg aaatgcgcca
                                                                     1020
agggttcagt gtctgtcttc agccctgctg aacgaagagg atactaaaga gaggggaacg
                                                                     1080
ggaatgcccg cgacagagtc cacattgcct gtttcttgtg tacatggggg ggccacagag
                                                                     1140
acctggaaag agaactetee cagggeeeat eteetgeate ceatgaatae tetgtacaca
                                                                     1200
tggtgccttc taaggacagc tccttcccta ctcattccct gcccaagtgg ggccagacct
                                                                     1260
                                                                     1320
ctttacacac acattcccgt tcctaccaac caccagaact ggatggtggc acccctaatg
tgcatgaggc atcctgggaa tggtctggag taacgcttcg ttatttttat ttttattttt
                                                                     1380
atttatttat ttattttttt gagacggagt ttcgctcttg gtgcccaggc tagagtgcaa
                                                                     1440
tggegegate teageteace teaaceteeg cetecegggt teaagegatt eteetgeete
                                                                     1500
agecteecta gtagetggga ttacaggege eegecaccat geeeggetaa ttttgtattt
                                                                     1560
ttagtagaga cagggtttct ccatgttggt caggctggtc tcaaactccc gacctcaggt
                                                                     1620
                                                                     1680
gatecaceca ceteggeete ecaaagtget gggattacag gegtgageca cegegeecea
cctaaccctt ccttatttag cctaggagta agagaacaca atctctgttt cttcaatggt
                                                                     1740
tetetteeet tttecateet ecaaacetgg cetgageete etgaagttge tgetgtgaat
                                                                     1800
ctgaaagact tgaaaagcct ccgcctgctg tgtggacttc atctcaaggg gcccagcctc
                                                                     1860
ctctggactc caccttggac ctcagtgact cagaacttct gcctctaagc tgctctaaag
                                                                     1920
tecagaetat ggatgtgtte tetaggeett eaggaeteta gaatgteeat atttätttt
                                                                     1980
atgttcttgg ctttgtgttt taggaaaagt gaatcttgct gttttcaata atgtgaatgc
                                                                     2040
tatgttetgg gaaaateeae tatgacatet aagttttgtg tacagagaga tatttttgca
                                                                     2100
actatttcca cctcctccca caacccccca cactccactc cacactcttg agtctcttta
                                                                     2160
                                                                     2220
cctaatggtc tctacctaat ggacctccgt ggccaaaaag taccattaaa accagaaagg
                                                                     2237
tgattggaaa aaaaaaa
```

```
<210> 5170
<211> 1462
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(618)

<223> similar to gi736727 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5170
actagatota gatototita atgocattot gatogadaog coattagoto cattottoca
                                                                       60
agactgcatg totgaaaatg ototagatga actgaatatt gaattgctac gcaataaact
                                                                      120
atacaagtot tacettgagg cattetataa attetgtaag aateatggtg atgteaeage
                                                                      180
agaagttatg tgtcccattc ttgagtttga ggccgacaga cgtgctttta tcatcactct
                                                                      240
taactccttt ggcactgaat tgagcaaaga agaccgagag accctctatc caaccttcgg
                                                                      300
caaactctat cctgaggggt tgcggctgtt ggctcaagca gaagactttg accagatgaa
                                                                      360
gaacgtagcg gatcattacg gagtatacaa acctttattt gaagctgtag gtggcagtgg
                                                                      420
gggaaagaca ttggaggacg tgttttacga gcgtgaggta caaatgaatg tgctggcatt
                                                                      480
caacagacag ttccactacg gtgtgtttta tgcatatgta aagctgaagg aacaggaaat
                                                                      540
tagaaatatt gtgtggatag cagaatgtat ttcacagagg catcgaacta aaatcaacag
                                                                      600
ttacattcca attttataac ccaagtaagg ttctcaaatg taaaaaatta taaatgttaa
                                                                      660
```

```
aaggaagtta ttgaagaaaa taaaagaaat tatgttatat tatctagact acacaaaagt
                                                                 720
                                                                 780
aagccacact atatcttcat gagttgcaaa tccatggaaa cacagtaaac cagccctgaa
acaaagcatt toottgtttt cagtggtatt agatottgtt tocacatgto tgtotcatto
                                                                 840
                                                                 900
ttcactgggc cttacaggtt agttttaatt aactctatgg tatttttctt attcttgttt
                                                                 960
gatcatgtta aaaattggac ctaataaaag tattttattc ttgcttttcc atgcttctct
                                                                1020
acaggtccaa atactgaatg tctcctttac tttttctctt ttaaattttt ttctagacag
                                                                1080
ggtctcactc tgtcacctag gctacagtgc agtggtgtga tcacagctca ctgcagcctc
gacttcccag gctcaagtga tcctcccagc tctcagcctc caaagtagct ggcactacaa
                                                                1140
                                                                1200
gtgtacaccc ccacacaagg ctaagttttg tattttttgt agagacaggg tttcaacata
ttatccaggc tggtgtcgaa ttcctgggct ccagggatcc acagtccccc ttggcctccc
                                                                1260
aaagtgetgg gattacatge atgageeact gtgetggget teatttacat tttaactgte
                                                                1320
                                                                1380
tgttccttgc ctagattcac agaaatccaa agctgtatgt agtcaacatg gttcacaagt
1440
                                                                1462
ttccctctgt cgcccaagct ag
```

```
<210> 5171
<211> 2287
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1727)
<223> similar to gi5868898 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5171
atgagegeeg ceacceacte geccatgatg caggtggegt eeggcaacgg tgacegegae
                                                                       60
cetttgcccc ceggatggga gatcaagatc gaccegcaga ceggetggcc ettettegtg
                                                                      120
gaccacaaca geegeaceae taegtggaae gaccegegeg tgeeetetga gggeeecaag
                                                                      180
gagactecat cetetgecaa tggccettee egggaggget etaggetgee geetgetagg
                                                                      240
                                                                      300
gaaggecace etgtgtacee ceageteega ecaggetaca tteccattee tgtgeteeat
gaaggogotg agaacoggoa ggtgoacoot ttocatgtot atoccoagoo tgggatgoag
                                                                      360
cgattccgaa ctgaggcggc agcagcggct cctcagaggt cccagtcacc tctgcggggc
                                                                      420
atgccagaaa ccactcagcc agataaacag cgtggacagg tggcagcggc ggcggcagcc
                                                                      480
cagececcag ceteceaegg acetgagegg teceagtete eagetgeete tgaetgetea
                                                                      540
tecteatect ceteggecag cetgeettee teeggeagga geageetggg cagteaceag
                                                                      600
ctcccgcggg ggtacatctc cattccggtg atacacgagc agaacgttac ccggccagca
                                                                      660
geccageeet cettecacea ageccagaag aegeaetace cagegeagea gggggagtae
                                                                      720
                                                                      780
cagacccacc agcctgtgta ccacaagatc cagggggatg actgggagcc ccggcccctg
egggeggeat eccegtteag gteatetgte cagggtgeat egageeggga gggeteaeea
                                                                      840
gccaggagca gcacgccact ccactccccc tegcccatcc gtgtgcacac egtggtegac
                                                                      900
aggeeteage ageeeatgae eeategagaa aetgeaeetg ttteeeagee tgaaaacaaa
                                                                      960
ccagaaagta agccaggccc agttggacca aaactccctc cgggacacat cccaattcaa
                                                                     1020
gtgateegea aagaggtgga ttetaaacet gttteeeaga ageeeceaee teeetetgag
                                                                     1080
aaggtagagg tgaaagttcc ccctgctcca gttccttgtc ctcctcccag ccctggccct
                                                                     1140
tetgetgtee cetetteece caagagtgtg getacagaag agagggeage ceccageact
                                                                     1200
geceetgeag aagetacaee tecaaaacea ggagaageeg aggeteeee aaaacateea
                                                                     1260
ggagtgctga aagtggaagc catcctggag aaggtgcagg ggctggagca ggctgtagac
                                                                     1320
aactttgaag gcaagaagac tgacaaaaag tacctgatga tcgaagagta tttgaccaaa
                                                                     1380
```

```
gagetgetgg ceetggatte agtggacece gagggaegag cegatgtgeg teaggeeagg
                                                                     1440
agagacggtg tcaggaaggt tcagaccatc ttggaaaaac ttgaacagaa agccattgat
                                                                     1500
                                                                     1560
gtcccaggtc aagtccaggt ctatgaactc cagcccagca accttgaagc agatcagcca
                                                                     1620
ctgcaggcaa tcatggagat gggtgccgtg gcagcagaca agggcaagaa aaatgctgga
aatgcagaag atccccacac agaaacccag cagccagaag ccacagcagc agcgacttca
                                                                     1680
aaccccagca gcatgacaga cacccctggt aacccagcag caccgtagcc tetgccctgt
                                                                     1740
aaaaatcaga ctcggaaccg atgtgtgctt tagggaattt taagttgcat gcatttcaga
                                                                     1800
gactttaagt cagttggttt ttattagctg cttggtatgc agtaacttgg gtggaggcaa
                                                                     1860
aacactaata aaagggctaa aaaggaaaat gatgcttttc ttctatattc ttactctgta
                                                                     1920
caaataaaga agttgcttgt tgtttgagaa gtttaacccc gttgcttgtt gttctgcagc
                                                                     1980
cetgtetact tgggcacccc caccacetgt tagetgtggt tgtgcactgt ettttgtage
                                                                     2040
tctggactgg aggggtagat ggggagtcaa ttacccatca cataaatatg aaacatttat
                                                                     2100
cagaaatgtt gccattttaa tgagatgatt ttcttcatct/cataattaaa atacctgact
                                                                     2160
ttagagagag taaaatgtgc caggagccat aggaatatct gtatgttgga tgactttaat
                                                                     2220
gctacatttt aaaaaaagaa aataaagtaa taatataact caaaaaaaaa aaaagtcgac
                                                                     2280
                                                                     2287
gcggccg
```

```
<210> 5172
<211> 2243
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(750)
<223> similar to gi1256378 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5172
tectecegge cagecaccaa gaccatgaac tttttttgge agagagetga gatettggga
                                                                       60
geoetggtet etgtactgte catetgggte gtgacggggg tactggtgta cetggetgtg
                                                                      120
gagcggctga tctctgggga ctatgaaatt gacgggggga ccatgctgat cacgtcgggc
                                                                      180
tgcgctgtgg ctgtgaacat cataatgggg ttgaccettc accagtctgg ccatgggcac
                                                                      240
agccacggca ccaccaacca gcaggaggag aaccccagcg tccgagctgc cttcatccat
                                                                      300
gtgatcggcg actttatgca gagcatgggt gtcctagtgg cagcctatat tttatacttc
                                                                      360
aagccagaat acaagtatgt agaccccatc tgcaccttcg tcttctccat cctggtcctg
                                                                      420
gggacaacct tgaccatcct gagagatgtg atcctggtgt tgatggaagg gacccccaag
                                                                      480
ggcgttgact tcacagctgt tcgtgatctg ctgctgtcgg tggagggggt agaagccctg
                                                                      540
cacagootgo atatotgggo actgaoggtg goocagootg ttotgtotgt coacatogco
                                                                      600
attgctcaga atacagacgc ccaggctgtg ctgaagacag ccagcagccg cctccaaggg
                                                                      660
aagttccact tccacaccgt gaccatccag atcgaggact actcggagga catgaaggac
                                                                      720
tgtcaggcat gccagggccc ctcagactga ctgctcagcc aggcaccaac tggggcatga
                                                                      780
acaggacetg caggtggetg gaetgagtgt cececaggee cagecaggae tttgeetace
                                                                      840
ccagctgtgt tgtaaaccag gtccccctcc tgacctctgc cccactccag gaatggagct
                                                                      900
etteccagee teccatetga etacagecag ggtggggaet cagegggtat aaagetagtg
                                                                      960
tgaccetget ettecagete etgggecage tetggaaggg etgtatttgg geetaateet
                                                                     1020
cagcaaatgt tctaccactc gcaggggcaa aggtggtgag ccacgggacg tccaagggga
                                                                     1080
ggctggcccc agcgcgccca tactgcctgc ctcatgcccc attctcagcc tggctggcct
                                                                     1140
ttgcctttat gaatctgagc ccctccatct gcctatagca ataggcacgg gggtgaggac
                                                                     1200
cctcacactc tcatttgagc ctccctgagg cagggagcca ggaggcacct gaggcctatc
                                                                     1260
```

```
tgtgccttag tcacttcagc tatgagccaa atgttccctt tcctggaggg gagaggcttc
                                                                     1320
ttactaggta agagacaggt ttcctctttc cttatttcct cagctgtgcc aacacaaaaa
                                                                     1380
acaactttgg cacaggtggt gggcaggggg tagagagatt tcagcttggg ttctgcacta
                                                                     1440
                                                                     1500
acageeteea ageeeeetgg caettetgtt geeetgagag tgteeeaggg gatteagagt
ctccagaaag atatggctgg gccaactctg ttgcctacct ggcctgaccc agtcggagcc
                                                                     1560
tgacatggtg gagggaaagg gagacaagtg gggctgcact cggtccagag gccagctagg
                                                                     1620
agggaaaccg cagetteetg gggettgtgt gtgaagatte etgaettagg ggtggetttt
                                                                     1680
gtttacaaga tgcaagaggg gaaacctgtc cccgactcat cgagacaaca tgcccagtta
                                                                     1740
tcagggagtc ctgtgtcaca aggtctgtct ctgccattgt aagcaagtgc cttgggcgag
                                                                     1800
ctggcctctg ccccacagtc tcatctgtac accgacaggg ttgatgcctc cctcacaggg
                                                                     1860
ttgagaacaa gagccagttg gccaagtacc tgtggttgtt gaagattggt tacttttacc
                                                                     1920
atcctgggga cagggaactc tgtggcccga ggctgcctca ctgaggagtc aggtgggctt
                                                                     1980
cccagcetce ccaggggcag tgctgagttt gtcttgactg ttctggccca aggtgggagg
                                                                     2040
aggtgggttt ggtcacttgc ctcccacttt aaatctctgt ctttccatct gtgaaatgac
                                                                     2100
ctctttgtgc cttcccagca ctgtcatcct gatcgcctgt gttctaggta gatgggtcct
                                                                     2160
tcagcccctc caggtctgtg aaaagtctgt ggaaagcact ggcctggaga ggggtggggg
                                                                     2220
gttgctggtg ggtgctccat tcc
                                                                     2243
```

```
<210> 5173
<211> 1381
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1382)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1202)...(862)
<221> misc_feature
<222> (1202)...(862)
<220>
<21> misc_feature
<222> (1202)...(862)
<23> similar to gi2984584 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5173
ttttttttt ttagttttt ttgaatatat ttacaatata aatactaatt tgtttccaaa
                                                                       60
gtacatattc ttttaacaat ttgagaaaat tatctagcat acgacgagta atttaatgta
                                                                      120
aagactetat agtagtgatt aaggaaaaat agaactgttt tggggataag gaateetggg
                                                                      180
ctatgaatgg gcatgatgat ctgaacttgc aaagggaaag tgaagcagct tcagtccacc
                                                                      240
attggcactg ctaatacaca tatgttaaag gactactatg tgagatagca acctggatat
                                                                      300
ggtgttaata aaaactaaac atgagaggat ataaaaagta cacatgcttg gcataggtgt
                                                                      360
gttactttta aagaagetea acattttatt eteattitea ataaettaaa tgaacageae
                                                                      420
ttaacacatt acacaaaatt aaagacttgt gcatatattt gatttcaaca ttaatgtcaa
                                                                      480
aaatacatag tatgatttta cataggattt gtgctacatt agaacactag agacaaacat
                                                                      540
cacttgagta ttaaggaaaa cattaaatat taaataactg agaaaatgtg taaacactaa
                                                                      600
tctaactggg ggttttgcta ttgcaacatg tccaatgaag tggtttcaac agtacaaaaa
                                                                      660
ggattaggac atgagttttt ccagtctaca tggaatatat ggatttcatt tcaggaatcc
                                                                      720
tttcataaaa actggtccag gataacagga gagaatccac tctcctgatt gttaatttgg
                                                                      780
tacactccat tctatgctaa tttttacttg caaacttggg tactgagtaa atactttaaa
                                                                      840
tcatcactcc ttatcaacat cttggtgaaa actgagggtt tgttggtgat tcagtgtaag
                                                                      900
```

```
atttgagttc atatgcagca ccgctatcaa cctccattga ctttctagag aacaggagcc
                                                                      960
gtacgtetet atggaggtag atetttecag atttagaaet etggaacete agatgtatga 🤄
                                                                     1020
                                                                     1080
ggtagcgtaa taaccgttct tctgtgtgtc ggatgttctc tttattaaca cttctcttca
cttcttgttt aacaggtaca gaaaaagttc tttgtcgtag gaatgtctga tgattggctg
                                                                     1140
gcatateteg taaateatat ateacaacaa acatetteae cacagtetta ttaggattaa
                                                                     1200
ataaggtcac ttgtattgtt cctgaaggag gtactcgata acccctttta ccaagggact
                                                                     1260
ctaaagtaat nacacccata taaggagagg gagnattgtc atntgaaaca ctgtagaatg
                                                                     1320
acacttcaac tggnagagtc aaatgtgtgg ggcagaaagc accacttgcc cctacctcgg
                                                                     1380
                                                                     1381
```

```
<210> 5174
<211> 1586
<212> DNA
<213> Homo sàpiens

<220>
<221> misc_feature
<222> (1222)...(950)
<223> similar to gi5809683 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5174
aaatgcacat ctcatggcag ctaagccaca tggctgggat ttaaagcctt tagagccagc
                                                                       60
ccatggettt agetacetca etatgetget teacaaacet tgeteetgtg taaaactata
                                                                      120
ttctcagtgt agggcagaga ggtctaacac caacataagg tactagcagt gtttcccgta
                                                                      180
ttgacaggaa tacttaactc aataattett ttetttteea tttagtaaca gttgtgatga
                                                                      240
ctatgtttct attctaagta attcctgtat tctacagcag atactttgtc agcaatacta
                                                                      300
agggaagaaa caaagttgaa ccgtttcttt aataatgctg atctactttt tgttgaattt
                                                                      360
gtattttatt tcaagtgtca aagaaatcat ctttgtttat ttagatgaaa ccaaacacta
                                                                      420
cacatttaca ctcacactgc ttccaggacc caagggtttc acagaccatt tgcctacctg
                                                                      480
gttctttcct ctcctcttc cagtgatttc tagaataccc tttcaaagga ccacatgaat
                                                                      540
atacgaactg taaaattcaa ctttgatctt ttgcgaaatg ttttatttac tgcttaaaat
                                                                      600
ctaggtgggt ggatatattc atgtatgcat atattgatag attaatacaa acataagtat
                                                                      660
gtatttaaat tgaaggataa gtaaagtgag agtacaacag ccccattctt agttaaaaag
                                                                      720
aaaagaaaaa gacaagagca agccactgcc accacaggta ccagcactta aatttgtcag
                                                                      780
caggetgace aaagagtgge etgtetgttg geatteateg gacatggeag etceetteag
                                                                      840
etetecagtg agtiticaagt teagageact ticagteett gietigitta tetatiactg
                                                                      900
aagggtttet aggaaggttt ageagtgett eaattttett ageateatte teaggtteat
                                                                      960
cttcctgtaa actactttca attttctcag ggaggtgctc agtaacttgt agtctgcctt
                                                                     1020
tecactette cagittitage teatggagig cetticgate etteigitti etticetgaa
                                                                     1080
cagteteace agagtaette tgaaatgeea teageaggee teetacagga gtgeecagea
                                                                     1140
aggetecaat tatgecacca gecaccagge caegeaggee taegtttate etaaaaagae
                                                                     1200
ttcccgtgac agtetttgcc aaacagetee eggaggeggt eecatecaga ttccgggtaa
                                                                     1260
tagggetetg ggacgtaggg aageegette tgacgeteet caaggactte egaateggea
                                                                     1320
gtcacagett eggcageaaa gaetegggga aataggeaca atgetetaca gagaaagete
                                                                     1380
egeggtgeeg gtggeggeac etecatggee ttetetegae etaeggaeaa aettgagege
                                                                     1440
traggartte aagtretege ggargtgeeg egggagageg taartgtarg aggtgagaat
                                                                     1500
ccgtgcattt gacccaggtt aaccctctgc cagagggctc gacacccaca ccttcagtcc
                                                                     1560
ccggcctcgc tttgcggacg cgtggg
                                                                     1586
```

```
<210> 5175
<211> 1139
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1113) ... (547)
<223> similar to gi3876299 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5175
tttttttttt taaaaatgtt agaaaaaaac atttattgac atgaaaaggg gtttcaaata
                                                                       60
tactgatttg tcaaacaaat agtaaaacaa catagagtaa tgattcattt tggtaaaaaa
                                                                      120
tatatatgta tatatagaaa aaaaaattct gcaaggacat atgctaaatt ggtaacagtg
                                                                      180
cttacccctg ggaagggggt atacagatgt tgatttactc tttgggtacc tgtatttccc
                                                                      240
agtttttcta taaatcacat catttgcttc tgtcataaga aaaaataata tctattatca
                                                                      300
tcctttattt tgatcaaaac aaatcaattt tttaaaaaat cttaggtttt tttaagaagc
                                                                      360
agaaataatt tocaaattgo otocagagac aatgatttta toototgoag aagotggtoa
                                                                      420
gaacettett gateacagee eeagttagat acagggaaga atggegette etacagette
                                                                      480
ageggeetea geteagetet gtgeeceaag gecaaaceag eteateteea geeceateea
                                                                      540
tectattett getgagteae eagteteate atetteagag ceatgteece ttggteagaa
                                                                      600
ggaaccatat gaccagettt cagaatecag tagaaagcaa ggttettgta ggaettgaca
                                                                      660
aaagcagatg tttccaaaga tttagggtca ctgtacaggg ccttccactt cagctgactg
                                                                      720
aatttaggca gttctggcca cttcagtttc cgcacccagg cctcctgacc catggtatct
                                                                      780
acgatgagat ccagctgtcc attatacacc gtcacgttga tccctgcctc cagcaactcq
                                                                      840
tccacaatgc taatgactgg cttcatgaag tcctcctcca tgttcacaaa gacgttggta
                                                                      900
geotggeete eccaggattg ateeteagga ataattttga gettetttet gatggggeea
                                                                      960
ttcatgaget ggettaagge atctegttgt aggtgtetea egtggegetg acaaagacaa
                                                                     1020
actaggtggc tctgtgtgaa ttctagactc gactccattg tagacgtggg agtgctttta
                                                                     1080
gttaagatgt tatagaagtt caccccatct gtcccttctg tcgtcttctc gcagccgta
                                                                     1139
```

```
<210> 5176
<211> 1397
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (298)...(1011)

<223> similar to gi264 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5176
                                                                       60
ctcagagcgg tggaattcga acgcttttga aagcgaatca ggaaattact tatcaatctg
aagccccata taattatgaa taatcctcgc tgccaaaggg aaggggattt tgagcaaaag
                                                                      120
                                                                      180
ctccacatct gcgcacacta gagttcaaag actccagctg ttggaaggtc ttgtgagcaa
gagccaaaga tgtttgtctt gctctatgtt acaagttttg ccatttgtgc cagtggacaa
                                                                      240
                                                                      300
ccccggggta atcagttgaa aggagagaac tactccccca ggtatatctg cagcattcct
                                                                      360
ggettgeetg gaceteeagg geeceetgga geaaatggtt eeeetgggee eeatggtege
atcggccttc caggaagaga tggtagagac ggcaggaaag gagagaaagg tgaaaaggga
                                                                      420
actgcaggtt tgagaggtaa gactggaccg ctaggtcttg ccggtgagaa aggggaccaa
                                                                      480
ggagagactg ggaagaaagg acccatagga ccagagggag agaaaggaga agtaggtcca
                                                                      540
attggtcctc ctggaccaaa gggagacaga ggagaacaag gggacccggg gctgcctgga
                                                                     . 600
gtttgcagat gtggaagcat cgtgctcaaa tccgcctttt ctgttggcat cacaaccagc
                                                                      660
                                                                      720
tacccagaag aaagactacc tattatattt aacaaggtcc tcttcaacga gggagagcac
tacaaccctg ccacagggaa gttcatctgt gctttcccag ggatctatta cttttcttat
                                                                      780
gatatcacat tggctaataa gcatctggca atcggactgg tacacaatgg gcaataccgg
                                                                      840
ataaagacct tcgacgccaa cacaggaaac catgatgtgg cttcggggtc cacagtcatc
                                                                      900
                                                                      960
tatetgeage cagaagatga agtetggetg gagattttet teacagacca gaatggeete
ttctcagacc caggttgggc agacagetta ttctccgggt ttctcttata cgttgacaca
                                                                     1020
                                                                     :1080
gattacctag attccatatc agaagatgat gaattgtgat caggaccaag atccctgtgg
taaacactct gattgaatct ggggttccag aaggtggaac aagcaggaat gggatccaaa
                                                                     1140
gagactecca eteagattet aaageattta aagacaatte tageagaatt tateaaaaca
                                                                     1200
agatgaaaca cagaaaagtt gaaaccacaa caaaatgaat tctattaaag aatagcccca
                                                                     1260
                                                                     1320
gatataaatt ctcttgaaag caatgttcat aaatatttaa gcaaattaaa gacaatgtta
                                                                     1380
acaaattttc tattaaatgc cctgagtgat aaaaccagtt ggcaataata ttgccttatt
                                                                     1397
aaatcttcaa aaaataa
```

```
<210> 5177
<211> 1096
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)...(650)
<223> similar to gi3882225 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5177
gtcagtgtgg tggaattcgg ctctgtgaag aaaagggtat gctttccatc agaagatcat
                                                                       60
ctagaggagt ttatagcaga acatetecet gaagcateca atcagagtet ceteaetgtt
                                                                      120
gcccatgcag acacaggcat ccaaaccaac ggtgacctgg aagacctgga ggagcatggg
                                                                      180
ccagggcaga cagtctctga ggaagccaca gaagttcaca tgatggaggg ggacccagac
                                                                      240
acactggccg aacttctgat cagggatgta cttcaggagc tgtccagtta caacggcgag
                                                                      300
                                                                      360
gaggaggacc cagaggaggt gaagacatcc ttgggagttc cacaacgtgg tgacctggaa
gacctggagg agcatctgcc agggcagaca gtctctgagg aagccacagg ggttcacatg
                                                                      420
atgcaggtgg acccagccac accggcaaag aaattggaag actccaccat tacaggcagc
                                                                      480
caccagcaga tgtcagcaag tccttcctct gcacctgcag aagaagcaac agaaaagacc
                                                                      540
aaagtggaag aggaagtgaa aaccagaaag cccaagaaga aaaccaggaa gcccagcaag
                                                                      600
aaaagccggt ggaatgtcct gaaatgttgg gacattttta atatatttta gagacctctg
                                                                      660
aagatteete gaccaccagg aagggeeeeg aegtggggat gteaacatgg eteagaettg
                                                                      720
```

```
atgtggatcg tgatcatttc gggaaatgtg ttactccaaa aacttttata atctttgctt 780 aatttgttt taaatacttt cctggctgg cgtggtggct tatgcctgta atcccagcac 840 tttgggaggc cgaggcgggt ggatcacctg aggtcaggag ttcaagacca gcctggccaa 900 caaggtgaaa ccccgtctct actaaaaata caaaaattag ctaggcgtgg tggcgcactc ttgtagtccc agctatttgg gaggctgagg caggagaatc acttgacctc aggaggcgga 1020 ggttgcagtg agccgagatc atgccactgc accccagcac ctggctacag agtgagactt 1080 tgtctcaaaa aaaaaa
```

```
<210> 5178
<211> 1108
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1108)...(381)
<223> similar to gi2650265 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5178
tttttttggg aggtacaatt ttaaaaataa tacactagat acgtttttcc taaagcagta
                                                                       60
                                                                      120
gatgacatto aataagocat gttatagata actaataaca atgotaacag ggtcaaacca
aaaaaaaggc acaggtcttt cacatgtttt cattagattt gtttaggcca agttttacaa
                                                                      180
                                                                      240
ttcacatctc cattttggca agtaatttcc tactgcaaat atttatttct gagaaacaac
tcaaataatt taatttcaat taagaaatta aatcaactca aaataggaat aagacaaact
                                                                      300
                                                                      360
cattatgett getteageat tteettetae egtgeecaaa aatgetgggg tetteaattg
                                                                      420
gtaaaagtta tettgtatgg ettgecattg acaatggeag ataaagetga tegggggate
                                                                      480
ttgccagatc tggttttggg tagétgtttg acaaacactg catttcgaaa agcagccaca
gggccaatgt totgtotaac gtgtttcaca atttottcca aaacttgctc ctctgttgca
                                                                      540
tttatatett tteteaatae acagagtget aaggggaeat gaeettttaa gggatettee
                                                                      600
                                                                      660
ttgccaacaa cagcacagtc tgccacggta ccatgggaaa ggattgactc ttcaatggcg
                                                                      720
cctgcagaaa ttctgtgacc tgcaacattt attacatcat ccactcgaga cataacatac
                                                                      780
aaatageett etteateeat gtaaceagea teeatggtat cataatatee aggaaatttt
tcaaaqtata aatqcttqaa tqcttcctqa ttcttccaga gtcctgaaaa agccccaggt
                                                                      840
ggcaatggta actttaccac aatatttcct aaacaccgag cettcagttt ttgcatgttg
                                                                      900
tcatccaaaa tcataacatt gtatcctggg acgctttttc ctgcttgccc tggtggaggt
                                                                      960
                                                                     1020
gttttagaat tgcctaatcc aacacatgac gcagtaattg gagatccagt ctcagtttgc
                                                                     1080
caccaatggt ctaagacagg tactctgaag acatttttgg accattccag ggtctctaca
                                                                     1108
tcacatcgtt ctccagccga attccacc.
```

```
<210> 5179
<211> 1025
<212> DNA
<213> Homo sapiens
```

```
<221> misc_feature
<222> (14)...(244)
<223> similar to gi3777621 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5179
tctctagtcc gtgcggtgga attcggagct gggcctccgg gactccgaca tggactacat
                                                                       60
ccagacggat gccatcatca actacgggaa ctccggggga ccactggtga acctggatgg
                                                                      120
cgaggtcatt ggcatcaaca cgctcaaggt cacggctggc atctcctttg ccatccctc
                                                                      180
                                                                      240
agaccgcatc acacggttcc tcacagagtt ccaagacaag cagatcaaag ccccctcact
ggcagttcat tgagagcagg gggcttcctc acgtttcccc ctcctccatg accccgtcag
                                                                      300
ccaagcacat ggaccccagt gcagccaagg ctggtgccat gagggctggt cacatgaaga
                                                                      360
                                                                      420
gctgctgttg aggatgccgc cattgttctt ctgtgtccat tatgggaaga caatctggag
ccaggcagag cctgtctttc ccaaagaagc tgaagtcttc ttctcttgaa cagtggggac
                                                                      480
                                                                      540
catctaatct cttgagccct tttcctgttg gcttctagga agctcagagc tagattcagg
                                                                      600
ggtgcaccca gacctgtcct agcatgctcc tttccctaat gaccgagtct ttcctgttga
attateceat tetecatggg tgeetttgae tttggeetee ttaetggaaa ttageggage
                                                                      660
                                                                      720
tgctgtttgc acacactgag ctgtgaggtg gctttccttg gaagtggatg atagtgtcct
cttcccttct tgcctctctc tttctcctga gacaggatcc ccctggggcc taggtttgct
                                                                      780
cctttgttgt acaggggctg tcccagttag tgctgacctt catcccagaa ccccctggga
                                                                      840
                                                                      900
aaatatcccc tgtcctcaga gctgtgttcc cctccccaag gacagtgcag acttaactga
gggagcctga taaaccttag ctgcatggca caattgcaat tttaaaatcc tttcttgaag
                                                                      960
                                                                     1020
ttgattggtg tttgtaattt gcttctcttt tttatttaat aaaatccaat gatccaaaaa
                                                                     1025
aaaaa
```

```
<210> 5180
<211> 1401
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (31) ... (697)
<223> similar to gi454325 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5180
                                                                       60
cgagaccact agtccagagc ggtggaattc gagagacagt atgaatgcca cgaatgtggg
                                                                      120
aaageettea accagaaate aataeteatt gtteateaga aaatteatae aggagagaaa
                                                                      180
ccctatgtat gcactgagtg tggaagagct ttcatccgca agtcaaactt tattactcat
caaagaattc atactggaga gaagccttat gaatgcagtg actgtgggaa gtcctttacc
                                                                      240
                                                                      300
tecaagtete ageteetggt geateageea gtteacacag gagagaaace etatgtgtgt
                                                                      360
gccgagtgtg ggaaagcctt tagtggcagg tcaaatctca gtaagcacca gaaaactcat
                                                                      420
accggagaaa agccctacat ttgttctgaa tgtgggaaga cctttcgaca gaagtcagag
ttgattacac atcacagaat tcatactgga gagaaacctt atgagtgcag tgactgtggg
                                                                      480
aagtetttea etaaaaaate acageteeaa gtgeateage gaatteacae tggagagaag
                                                                      540
                                                                      600
ccttacgtgt gtgctgagtg tgggaaggcc tttagcaaca ggtccaattt gaataaacat
```

```
cagacaacac acactggaga caaaccctac aagtgtggca tctgtgggaa aggcttcgtt
                                                                      660
cagaaatcag tgttcagcgt ccatcagagc agccacgctt gagagaaaca gtgtgagaaa
                                                                      720
acccccctga gggttgggtc tgattgtaca ctgttgcacg catgcagcag aaaaatatgt
                                                                      780
atattattgt aaatagaaat gaccacatca gaatgtcaca catggctgtt ctggagaggg
                                                                      840
cctctgagaa ggcactgaat gaggcgaggg accettecta cattgtcacc atccccagta
                                                                      900
aaccttgggt cattattcat actgacaagg aaccgagtca atttggtgaa taggaaaagc
                                                                      960
cttctcatga aaactacaat agaatactgt taccaaattc ttcctaagaa agatcgtatt
                                                                     1020
                                                                     1080
aagttaacga taatcctgtt tactgtggat taggtatagt gccaacaaat tgaatgataa
aacaacataa tacgtagtta ttttgatagt gatgaateet aagttatgtg agttgttegt
                                                                     1140
tgtggaacac attgtgtaac agactcctgg gtgtttttct ttctcattcg aatctaccac
                                                                     1200
agttggtcat atccaaccct cattcagtat ttctatcaag aaagagatgc tacaaaaaaa
                                                                     1260
aaaaagaaaa aacctttttt gtttccaaac ttaaccctca aatggttggt tgggcccct
                                                                     1320
ttggttttaa caaaaattgg cccccccta ttaatctaca aggagtgggt ttaaccctaa
                                                                     1380
gggcccttaa cctttttggg g
                                                                     1401
```

```
<210> 5181
<211> 1650
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1652)...(1538)
<223> similar to gi180249 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5181 cccacgcgtc cgtctacatg gttgtcaaat ctgttgaatt gatgtcagtc taccagtatc 60 ctgaaaagtc tcagcaggca gtactcacgc cacaattttt gcacgtcatt acaagtaaca 120 acctgcagtg tttcactgtg cggtgcagtg cggcggcagc tcgtgaggag gacccgtaca 180 tggacaccac cetgaagget tgcccacetg teagtatgga tgtetgtget ttaagaatac 240 agetttteat aggettgaaa gecatetgte aetttaaaaa eeacateata ettttgaeta 300 aagcagaacc tgaagccatt ccagagagaa gacagtcacc caagaggctt ctttcgagaa 360 aagataccag tgttaaaatc aaaatacctc ctgtagctga ggctgggtgg aatttgtata 420 ttgtgaatac gatctcacca gagcaactgt aacaaagaga tggtagacta tagcaatacc 480 tataagactg tcaaaaccca gagetgcatt cacettetca gtgaggetca tetgttagtg 540 cgagctggcc tgatggatgc cagtcagctg gaacctggag agaaggcaga gcttttggaa 600 gcatttaagg aaagctgtgg gcaccttggg gactgttaca gcaggcttga ctcccagcat 660 teteatetea eettgeeata etataagatg tetggtttgt etatggetga agttetggee 720 cgcacggact ggacagtaga ggatggatta cagaaatacg agagaggatt aatcttttac 780 attaatcatt cactttatga aaacctggat gaagaattaa atgaagaatt agcagcaaaa 840 gtggttcaga tgttttatgt ggctgagcca aagcaagtgc cccatattct ctgtagtcct 900 tctatgaaga atattaatcc tttaactgcc atgagctatc taaggaagct ggatacttct 960 gggttttcat cgatcttagt gacattgacc aaggcagcag tggctctgaa aatgggagat 1020 cttgacatgc acagaaatga aatgaaaagc cattcagaga tgaagttggt atgtggcttc 1080 attetggaac eteggetgtt gatteaacag agaaagggac agattgttee aaccgagett 1140 gcacttcact tgaaggaaac tcagcctgga ttgcttgtgg cttcagttct gggcttgcag 1200 aagaacaaca aaattggaat tgaagaagca gattcctttt ttaaggtgct ttgtgctaag 1260 gatgaagata caatteetea getettggta gaettttggg aageteaget agtggeatgt 1320 ctcccagatg tggtacttca ggaactcttt ttcaaactca catcacagta catctggaga 1380

```
ttgtctaagg aggcagcete etgacaccae accattgega acateggagg atettattet 1440 cetggtcatt eettggtaga tatttggaat aaaataatea eactgactgt gattgggtag 1500 ateacattee atatteteet gtgagtetea gaagatgett eattttgtag aaeggtgtaa 1560 gtggttteea tteeageatg aatgtggteg gteacatgge agtggagtaa ecaaatteea 1620 ggtgttettg gaaacattte tagggtttgg 1650
```

```
<210> 5182
<211> 1069
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (24)...(718)
<223> similar to gi535185 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5182 ctgatcttaa ggataccatt ggctctgtca ccaaaacacc gagtggttta tacataattc - 60 acccagaagg atctagctac ccatttgagg taatgtgtga catggattac agaggaggtg 120 gatggactgt gatacagaaa agaattgatg ggataattga tttccagagg ttgtggtgtg 180 attatetgga tggatttgga gatettetag gagaattttg getaggaetg aaaaagattt 240 tttatatagt aaatcagaaa aataccagtt ttatgctgta tgtggctttg gaatctgaag 300 atgacactct tgcttatgca tcatatgata atttttggct agaggatgaa acgagatttt 360 ttaaaatgca cttaggacgg tattcaggaa atgctggtga tgcattccgg ggtctcaaaa 420 aagaagataa tcaaaatgca atgcctttta gcacatcaga tgttgataat gatgggtgtc 480 gecetgeatg cetggteaat ggteagtetg tgaagagetg eagteacete cataacaaga 540 ccggctggtg gtttaacgag tgtggtctag caaatctaaa tggcattcat cacttctctg 600 gaaaattget tgeaactgga atteaatggg geaegtggae caaaaacaae teacetgtea 660 agattaaatc tgtttcaatg aaaattagaa gaatgtacaa tccatatttt aaataatctc 720 atttaacatt gtaatgcaag ttctacaatg ataatatatt aaagattttt aaaagtttat 780 cttttcactt agtgtttcaa acatattagg caaaatttaa ctgtagatgg catttagatg 840 ttatgagttt aattagaaaa cttcaatttt gtagtattct ataaaagaaa acatggctta 900 ttgtatgttt ttacttctga ctatattaac aatatacaat gaaatttgtt tcaagtgaac 960 tacaacttgt cttcctaaaa tttatagtga ttttaaagga ttttgccttt tctttgaagc 1020 atttttaaac cataatatgt tgtaaggaaa attgaaggga atattttac 1069

```
<210> 5183
<211> 1805
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1806)...(778)
<223> similar to gi32391 in the genepept database release 114,
```

# Run with FASTXY 3.3t00, default parameters

```
<400> 5183
ttttagggcc agcgtctggg ctccatttga tcaggtcagc atttattagt aggaagcagt
                                                                       60
aacatttaca actggtcctc gggcaggaac cgggagggcc accacccgcg gccgcccacg
                                                                      120
cgagcccagc cttcaggagg agagagcagc gcgtccaatg cactgaggac aataccccaa
                                                                      180
cocgcotoga ggotoctgog gotoctotaa gcotoactgg atgatotoca coagaggtoc
                                                                      240
tegegtgeet eeetgaggaa agggggettt egeaactggt gggeaaceee geegggette
                                                                      300
accgtggget agcagecggt gtgteegeac tgttgteget etgeetteat tettggaatt
                                                                      360
ggggcgcact tggacccctg tttgggcagt gctggggggt gagggggact aaactaacag
                                                                      420
cacttttcaa aaacatgggg gacatttaca caagagaggg ctccccaagc cagcttgcac
                                                                      480
tcacaaaata tagcatttct taaggaacca atggagcagg aaaaagaggg agtgggatag
                                                                      540
ggcgaaaccc caaagccact tggtttttcc aacacgtaaa cgagcaaata cagagtcccc
                                                                      600
caaatacctc agagaccaac ccccagtcc cttttattta aaaagaaaaa aaaaaagaag
                                                                      660
aagaagteca agtegetgga gagtttetgg aaateaagca ecaaacacec acaaaqqaaa
                                                                      720
acagcaacaa caacaaatee getgeeettg agegeteeeg ceagcaeege geegggteag
                                                                      780
teteetttgg ggeatttete ettgeteate ttttteattt teateetaeg gttetgaaae
                                                                      840
cagattttga cctgtctctc tgttaggttg agaatcctgg ccacctcgta gcgccggtcc
                                                                      900
cgggtgaggt acatgttgaa gaggaattet ttetecaget caagegtetg gtatttggtg
                                                                      960
tagggacage gettitteeg ggitggagega gegitggatee agittegegge gggqitgitt
                                                                     1020
gggtcaagtt getgetgetg eggetgegaa tgetgettet eeteeteett eageqaacaq
                                                                     1080
cetgggateg ggtggteget geaagetgag ggeteegaeg ageegeeegt eeeagtegeg
                                                                     1140
gccccgatcc etgccccagg cccggttccc cccgtcgccg etgccgcctt ctcctgcagg
                                                                     1200
aacgagttgc acgagaactc ggggccgctg ctcccctggg actcccgggc cacggagcac
                                                                     1260
tcagtccgtt tggaggagga ggataaggaa gtggaggagg aggaggtggt ggaggcggcc
                                                                     1320
gtggcggggg ccggggccgc tcgggtttca ggcttaatcc cgtagtggcg cccgttggct
                                                                     1380
gggccgctgg ggccagggct gggaccgcgg cccggaccgc cgcctccacc accaccqcca
                                                                     1440
cegecegeae egecegggaa geegggeage ggetecatee aggagegeae gtageggeeg
                                                                     1500
ggctcggagg cagaggcggc cagggggcggc gggggaacgt acgggtggta gaggccgctc
                                                                     1560
ategeegeeg etgeeggggg etggggaggge acegeggace acgaggeaga gaacaeggee
                                                                     1620
gatctggggg caaaactaca cgaggcgaac tcggcggcgg tggcggccgg gccatcagcc
                                                                     1680
acacetgeag geoggeeetg egegeetgge eeeggeggee egaagegege egegaacace
                                                                     1740
tegtegeeet catggeetat aagegagtee aegtagtagt tgetgagggt gecaetggaa
                                                                     1800
gacat
                                                                     1805
```

```
<210> 5184
<211> 774
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (4)...(379)
<223> similar to gi3387798 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
geggaggaet ttgeggetgt gegggeegat gaeteagagg tggatgggga etgeageetg
                                                                       60
actggacctt ctgctttggt gggctcctat ggcacctccc cagagggggt cggaggatac
                                                                      120
atccattccc atcggcccct gggcccaaga gagtttgagt ccttcattga tgtctatgcc
                                                                      180
atcoggagtg ctgaaggagc cccccagaag gaggtctact tcatgggcct cattgatatc
                                                                      240
                                                                      300
cttacacagt atgatgccaa gaagaaagca gctcatgcag ccaaaactgt caagcatggg
                                                                      360
gctggggcag agatctctac tgtccatccg gagcagtatg ctaagcgatt cctggatttt
                                                                      420
attaccaaca tetttgeeta agagactgee tggttetete tgatgtteaa ggtggtgggg
ttctgagaca cttgggggaa ttgtggggat attctagcca ccagttctct tcttcctttg
                                                                      480
ctaaattcag gctgcaggct ccttccatcc agataactcc atcctgtcga gtaggctctt
                                                                      540
totgaccotc agaaatacat tgtccttttt cotctttgcc catttttctt ccctctctt
                                                                      600
ctccccatga gaagtctgct tgtagtatta gaatgttatt gttgactctc tcccaagtgc
                                                                      660
                                                                      720
cttgatcttt gtaatatctc ctgttgtttc tatgatatag gagctagggg aagggggttg
                                                                      774
cttgccttct tcaggacctg actggacaga tggacctggc tcaagcaact actc
```

```
<210> 5185
<211> 1582
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(742)
<223> similar to gi498015 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5185
gtggtgtcgt acatgacaca atgacgtgtt tcgggccata tcctattgga actggacttc
                                                                        60
                                                                     <sub>.</sub> 120
agggaataac cttgtgttat agttgttttc cctccttctg caagatgaaa agcaggatgt
gcatggctat cagcatttgt cagacgcttt ccatgttgag ttttgtggtc tgtgctttca
                                                                       180
ggtacaggca tatgttcaaa aggggttggc caatgggtac atgttgtttg tttctgccca
                                                                       240
cagetgeece agtgeteage tgtgaagetg caacacagae tgaaaggaga etggatetgg
                                                                       300
etgeagtgae tetgaggaga ggettgagat etagagette gegatgeaga eegeggtett
                                                                       360
tgatagatta caaatcctac atggacacca agctgctggt ggcgaggttc ctggagcagt
                                                                       420
cctcttgtac catgacccca gacatccatg aacttgtaga aaacattaaa tctgttttga
                                                                       480
aatctgatga ggagcacatg gaggaagcca tcacaagtgc cagttttcta gaacagataa
                                                                       540
                                                                       600
tggccccatt gcagcccagc acatccaggg cccacaagct gccctcgcgg agacagcctg
geetgetgea cetecagage tgeggegace tteacacett cacaceageg gggaggeece
                                                                       660
gageegagag gaggeeeegg egagtggagg etgageggee acacageete attggggtea
                                                                       720
teegagagae tgteetgtga accetggaag acagaaggee acteeaaggg gaaggateee
                                                                       780
tetectetet gecatttett ggetgggage tgtggteeac etcaaaaaaa aggageacte
                                                                       840
tggaggacac gttttcccac ctgttggctc ccgtgtctgc tgactgaggg cattcaggag
                                                                       900
taaatgcaca ggtcggtcca ggcccgtctg ggtttgggat gcactgagtt ggaggttatg
                                                                      960
aaagetttga teetettett eetetgetgg geetegeage atteecaagg gteacatgee
                                                                      1020
ctggcatggg cagaaactgg gctaatgatt ctttgcccac ttcacccctc gtgtctctct
                                                                      1080
ttgttgctaa gttctttccc tcttggaagg acagatctgc cgggctgcta tttatagttg
                                                                      1140
cctttggcct ttcactgctc tgcgatttgg caggaaataa ggcgattaac cctatgtgtc
                                                                      1200
cacaagcete aagcettgtt teaggteace etcaaateae actetetta ggeaaaacag
                                                                      1260
gaaacttctt aagtgacaaa ttttaatgcc agacatttaa ggagaggatt attgttgatt
                                                                      1320
ccatttactc atgettgeaa aactagagac cectaaggea gaactgagaa taaacatgtt
                                                                      1380
tactttgggc cactgggctt gatgtgtaat atttgttatt acatgtatcc ttcgggctgt
                                                                      1440
```

```
ategiteatt cagcaageae ttiggetggat ggetteatgg agetgeette teatgggate 1500 geggacaata aateaataaa gtaattacag attiggggatt attigetaaaa agagcaatag 1560 gtggttagag ggaatteeae ca 1582
```

```
<210> 5186
<211> 1949
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1940)...(348)
<223> similar to gi4314433 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5186
                                                                     60
ttttttttt cgttgaaaac caataattta tcaaaacgct gcgtgtgtat gggggggga
                                                                    120
ggggtgtccc aacaaacagg gcagcggggg gcggacccac aggcaggaaa cggtgcccgg
                                                                    180
aaagggggg cggcagcctt gccactggct aggccatcgc gggcgggcag gctagacatt
                                                                    240
cttgccgcgc aggcgcagtt cgtggcgtcg caggtggttg tagagcgact gcacataggt
gaagacacac ttggggtcag gcttcttgcc catgatcatc atgtcgtcca cctccaccag
                                                                    300
gggcacacag tccaccagca tccgtggggc cccgagcagg ggttaggact ttttggtttt
                                                                    360
                                                                    420
taccageece ttetggacca gacageggta gaatteetgg atgtacgtgt acaegcaett
ccagtcagge tetegaagee geaceatgte etetgtatee aggagetgeg ggeagteege
                                                                    480
atgggtetee geagatgaga aggecacete gaagttetgg egteggttet gagggetaag
                                                                    540
ctgcccatag tcgaaggcct cagggaagaa gttgtgcacc agggcacaga aggccatccc
                                                                    600
                                                                    660 °
atcactccag ctggaggaga agttctggat gtcgacgtgc tcgtagccgc gagtcttggc
                                                                    720
togacaccag tocagoagea totgottgat gotgotggcg ttggggaccc cgaagotggt
ggatcgctgc acggctgcgc ggggtccgcc agggctgccg gccgcgccct ccttctccag
                                                                    780
                                                                    840
cttctcaatc atggccttgc gcgcctggga ggctgaggtc ttgggcagac tctgcgcctt
                                                                    900
catcagetet ttettettet eggeetgeeg tttetegage geegeeagge tgeeggeeeg
                                                                    960
tgggctggcc tggtcctcgc ggtcgaagat gctgcccatc ttcttggatg aggaggaaga
                                                                   1020
ggagaaggtc ttggtttgca tcatggtgct gccactgcca ttctccgagc gcctcacgaa
actegactee actgtggtgg tgegggeegt cegtgtgeea teattggagt ggaegageeg
                                                                   1080
ctcagtcttg gtaacagtgc tgacagcaga gccatcagct gcccgctggc tgtgcctcgt
                                                                   1140
ggtggtctca gtggctgtgt tgccgcgccc ctcccctggc cggccccgtg cctcctgcag
                                                                   1200
cegeegttee egeteettgt eeegetggte tetetteett tgteggaget caegaagtge
                                                                   1260
                                                                   1320
ageceggatg agetteeget etteaaagte egtgetetga teeageatet tgteeaagae
teetteatee teaatagtea teageteete agegeteaga gggeteegee ettetggtge
                                                                   1380
                                                                   1440
tttgttcact cgggtctgct cagccccatt ggccacttcc actgctgcag cgagaggctc
                                                                   1500
tgctggctct gcttccatct tgatgctgca gcctcctcgg ctactggggg gggcatggct
                                                                   1560
gaagetggtg acatgagtga cactgeecag eegagecagg gteecaggge tgttgacacg
                                                                   1620
ggtgatggtg ctcttgcccc cactactggt gctgagtagg gtcgggggcg cccgcagccc
                                                                   1680
cagtgtcagt tetgecetet ggttgeetgt gggcagcage acceggeetg tggaggeetg
gccacggccg tecttgatet cgatggtgaa tgtggtette atactgcccc ctggctcggc
                                                                   1740
                                                                   1800
agtgeegaeg geeaegggea geggggeaec aggeteetet gaaegtgeea caggeeeece
                                                                   1860
1920
gcagettega agetgggeca ggggetggge tacteetegt tgeteettge tgaaceggga
```

ggaggtatca ctgggcgaat tccaccacc

1949

```
<210> 5187
<211> 1091°
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1080)...(844)
<223> similar to gi3342738 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5187
atccgtccgc tgaatttttt ggaaaaacgg aaaaaaccaa gtgcctttag gaaaaaaaaa
                                                                   60
ggctggggcg ggtggctccc ccctgtgatt cccgcccttt gggaggccca ggaaggagga
                                                                  120
180
tctgtagaaa aatggaagag attggggagg gaggaaagag gctgcctggg tccaggttgt
                                                                  240
                                                                  300
geetetgtgt gaagagaeae eageggetge eagtggggag tgeggagtaa aggeetgegg
gaggagatgt ccgctctcag gggctcggaa gcccctcagc ctcttgcctc cccaacggga
                                                                  360
                                                                  420
gacatgtagg aggccgagca agctgggtgc ccttgagaga caggcccagg cagggctgtg
gecacageag ceetggggge teeceagega ggtggaggea gaagtteeag gageetggga
                                                                  480
gccacccagg gcaaggagtg accctggaag ccatccagcc tcctggaaag tggaagtggt
                                                                  540
ttaaaaacac agtgggcttt tccggttgct agtaacacat agaattacag agttcacgtt
                                                                  600
ttagtcccag acgggagact gaggctcgag actgaggaag gcatctgccg tccggggttg
                                                                  660
gageteetga ggaecaacae etgeteageg geteggeece tggteteeet gagatgetea
                                                                  720
ggccggagag aagcgggatg atggttccag agcgtcctcc tccaagtctc cgaggcccca
                                                                  780
geggeggtte gggeaceggg agaecegegg ggeteteagt ggeacateeg ggeggteatt
                                                                  840
tettteagtg getecagete ettggtgteg atgaggeega acteettgae gaaatagtag
                                                                   900
aagtgettgt ageaggtgtt caegtgggee teggageeea tetgeeegat geggteaaag
                                                                  960
tggtggatgt agacgtgcac gaacacgcgg aacagccgca acaggatctt ccgcaccgtc
                                                                 1020
tgcaggaagt tcttgggaaa cggagtgcca acgttggtgg ggaagaggtc ctcgttgttg
                                                                  1080
                                                                 1091
aagtcccgcc a
```

```
<210> 5188
<211> 2014
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (18)...(1417)
<223> similar to gi56494 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5188
togacccaeq egteeggatt tatgaagetg atttgcagta ceqtgtcace ctaqattcae
                                                                     60
taagacaaat atcacgaagt tttttctctg gaactcaaga gagaaaggtt caaaggaaca
                                                                    120
tcacagttcg aaaatcagaa tgcactaagc actccttcta catgttggac aagcatgact
                                                                    180
ttcaggactc tgtgagaata acgttggact ttaatcttac cgatccagaa aatgggcctg
                                                                    240
ttcttgatga ttctctacca aactcagtac atgaatatat tccctttgcc aaagattgtg
                                                                    300
gaaataagga aaaatgtatc tcagacctca gcctgcatgt cgccaccact gaaaaggacc
                                                                    360
tgctgattgt ccgatcccag aatgataagt tcaacgttag cctcacagtc aaaaatacaa
                                                                    420
aggacagtgc ctataacacc aggacaatag tgcattattc tccaaatcta gttttttcag
                                                                    480
gaattgaggc tatccaaaaa gacagttgtg aatctaatca taatatcaca tqtaaaqttq
                                                                    540
gatatecett eetgagaaga ggagagatgg taaettteaa aatattqttt caqtttaaea
                                                                    600
catcctatct catggaaaat gtgaccattt atttaagtgc aacaagtgac agcgaagaac
                                                                    660
ctcctgaaac cctttctgat aatgtagtaa acatttctat cccggtaaaa tatgaaqttg
                                                                    720
gactacagtt ttacagctct gcaagtgaat accacatttc aattgctqcc aatqaqacaq
                                                                    780
tccctgaagt tattaattct actgaggaca ttggaaatga aattaatatc ttctacttga
                                                                    840
ttagaaaaag tggatctttt ccaatgccag agcttaagct gtcaatttca ttccccaata
                                                                    900
tgacatcaaa tggttaccct gtgctgtacc caactggatt gtcatcttct gagaatgcaa
                                                                    960
actgcagacc ccatatettt gaggateett teagtateaa etetggaaag aaaatgaeta
                                                                   1020
catcaactga ccatctcaaa cgaggcacaa ttctggactg caatacatgt aaatttgcta
                                                                   1080
ccatcacatg taatctcact tcttctgaca tcagccaagt caatgtttcg cttatcttgt
                                                                   1140
ggaaaccaac ttttataaaa tcatattttt ccagcttaaa tcttactata aggggaggac
                                                                   1200
ttcggagtga aaatgcatct ctggttttaa gtagcagcaa tcaaaaaaga gagcttgcta
                                                                   1260
ttcaaatate caaagatggg ctacegggea gagtgeeatt atgggteate etgetgagtg
                                                                   1320
cttttgccgg attgttgctg ttaatgctgc tcattttagc actgtggaag attggattct
                                                                   1380
tcaaaagacc actgaaaaag aaaatggaga aatgaaatat tttacgaaag aaaataataa
                                                                   1440
caattattca ataatctatc ctcaggtttg cctcaaatat gtgacaagaa atgtataatt
                                                                   1500
catgacatag tcatgtaact atgtaatcca tcagggattc attacttgga aaatgacagg
                                                                   1560
gcatgcatta tccaaaaaca ataccaaaaa gacatatttt ataaaatgac aaaaaatatt
                                                                   1620
ttacataatt actcattitt gitgagtaag caaaattaca aagtgittit aaaaaaacct
                                                                   1680
gtacaaatat gtttatgtat taaatcacca tccaaaatat ttaaggaata tataaaaaga.
                                                                   1740
tttttatgat catagaaaca tctattttca aaacaatata aattaagctt ttccccttga
                                                                   1800
1860
ttacctgaaa aagatcattt ctccctattc aaatgagaat attttccctc ggtagaatcc
                                                                   1920
atatacaata tggattgaaa attaagtcac gaagaataca tttagcatct ttgtgttggg
                                                                   1980
ttctatacct aaaaattttc cctcccggcc caag
                                                                   2014
```

```
<210> 5189
<211> 1291
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (947)...(502)
<223> similar to gi5020266 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5189
ttttttttt ttcccagttt caggtatgtc tttattagca gtgtgaaaat gaactaatac 60
agactggaag ccttgtgaca ggaaaactga acatctgaga catctatagg aaaaaaagat 120
```

```
ctgcttacat ccagtccttg gagttccagt agactgattt attcaccaac agcattgctc
                                                                      180
ctccagctcc attccaggag acaggcaccc cagaagtagc aggactggta gacatcacta
                                                                      240
                                                                      300
gtattgtata tgtgttgggc catgtttgtg tgttgaggaa gaggatgggg aaaacaatga
tggtggtcac caggtaagat ggggacccag gaagggattg caagtccagg ccccatgaac
                                                                      360
acccccaaag aatgcccctc ctcttggaaa taaaagtggg tcttggatcc agggagatca
                                                                      420
acagttgcaa ggctgatatt aagagttgtc tattggatct gttctaaggg atatgttatg
                                                                      480
tgaagccaaa ttaatgaagt taggaagtca cattacaagt tgatgggtac tttgtttcat
                                                                      540
                                                                      600
caacttgtag aatttettee ttttgaacet etttaetggg tgttagetgg tgaettaggg
gtagggatgt ggaggctgtc ataggcccgt ctccgctctt gggcctgaag ggaatcctat
                                                                      660
gtatgcggca gtatacaaag tatgcaggga tggggaggat gacaatggca aaaagggtga
                                                                      720
tcatcaagag cagtgcccac ggtgggtatg gtcgaagcac ctcttttgag gtgcttgagt
                                                                      780
cccaggacat gtaggtgatc ggcttcatac aaagatgaac catcatggtc acaaagatga
                                                                      840
ttagcagcac aactggacac agatggggcc acagccaacc aaagatggga gagatggggt.
                                                                      900
                                                                      960
ggcccaacag gatcgtcagg tctgcaagga acctggagaa gggccaccag agtgtgggat
gcccagttag gcctcaccac cttggaggca gggccagccc aaccttggca tctttcaaac
                                                                     1020
                                                                     1080
attotattgt atototaato tootgtttoa totoaagtot tgtoototot catottooco
ctagtcagtc tgtcttctat cctaacccaa gaaacttttc caaacacccc tctcctgctc
                                                                     1140
aagaacttte catgggtate caatggeete aggagaaagg ceaagtetet tteatteate
                                                                     1200
ccataaatat gagaatgtet atgatgtgcc aggaactett ttaagtgctg gatatecage
                                                                     1260
agtgaacaac acagataaaa taaagtggca t 🕆
                                                                     1291
```

```
<210> 5190
<211> 1736
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(1009)
<223> similar to gi5834569 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5190
gtgcgaggaa ttcggcgatc aaggtatttg tggaatcgat gaatttgata agatggggaa
                                                                       60
tcaacatcaa gccttgttgg aagccatgga gcagcaaagt attagtcttg ctaaggctgg
                                                                      120
tgtggtttgt agcetteetg caagaactte cattattget getgeaaate cagttggagg
                                                                      180
acattacaat aaagccaaaa cagtttctga gaatttaaaa atggggagtg cactactatc
                                                                      240
cagatttgat ttggtcttta tcctgttaga tactccaaat gagcatcatg atcacttact
                                                                      300
ctctgaacat gtgattgcaa taagagctgg aaagcagaga accattagca gtgccacagt
                                                                      360
agctcgtatg aatagtcaag attcaaatac ttccgtactt gaagtagttt ctgagaagcc
                                                                      420
attatcagaa agactaaagg tggttcctgg agaaacaata gatcccattc cccaccagct
                                                                      480
attgagaaag tacattggct atgctcggca gtatgtgtac ccaaggctat ccacagaagc
                                                                      540
tgctcgagtt cttcaagatt tttaccttga gctccggaaa cagagccaga ggttaaatag
                                                                      600
ctcaccaatc actaccaggc agctggaatc tttgattcgt ctgacagagg cacgagcaag
                                                                      660
gttggaattg agagaggaag caaccaaaga agacgctgag gatatagtgg aaattatgaa
                                                                      720
atatagcatg ctaggaactt actctgatga atttgggaac ctagattttg agcgatccca
                                                                      780
gcatggttct ggaatgagca acaggtcaac agcgaaaaga tttatttctg ctctcaacaa
                                                                      840
cgttgctgaa agaacttata ataatatatt tcaatttcat caacttcggc agattgccaa
                                                                      900
agaactaaac attcaggttg ctgattttga aaattttatt ggatcactaa atgaccaggg
                                                                      960
ttacctcttg aaaaaaggcc caaaagttta ccagcttcaa actatgtaaa aggacttcac
                                                                     1020
```

```
caagttaggg cctcctgggt ttattgcaga ttaaagccat ctcagtgaag atatgcgtgc
                                                          1080
1140
acacagtcaa atactgttct ctgaaaaatg atgtcccaaa agtattataa taggaaaaaa
                                                          1200
gcattatata taatacacta atttaagaag tgataaagtc tccagatgca gtagctcaca
                                                          1260
ctgtaatcac agtgactcag gaggctgagg tgagaggatt ccttgaggcc agggttcgag
                                                          1320
accaaccttg ggcaacatgg caagacccca tttcttaaat tagtttatta tatttaatgc
                                                          1380
ttttttccta ttataatact tttgggacat catttttcag agaacagtåt ttgactgtgt
                                                          1440
1500
cactgagatg gctttaatct gcaataaacc caggaggccc taacttggtg aagtcctttt
                                                          1560
acatagtttg aagctggtaa acttttgggc cttttttcaa cgaggtaacc ctggtcattt
                                                          1620
agtgatccaa taaaattttc aaaatcagca acctgaatgt ttagttcttt ggcaatctgc
                                                          1680
cgaagttgat gaaattgaaa tatattatta taagttcttt cagcaacgtt ggtcga
                                                          1736
```

```
<210> 5191
<211> 2291
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1985)
<223> similar to gi3329465 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
`<400> 5191
gagatacccg tgtaggcctt tttgcactaa gtgacattaa agtaggcact gaacttacct
                                                                       60
tcaactacaa cctagaatgt cttgggaatg gaaagactgt ttgcaaatgt ggagcccga
                                                                      120
actgcagtgg cttcttgggt gtaaggccaa agaatcaacc cattgccacg gaagaaaagt
                                                                      180
caaagaaatt caagaagaag caacagggaa agcgcaggac ccagggtgaa atcacaaagg
                                                                      240
agcgagaaga tgagtgtttt agttgtgggg atgctggcca gctcgtctcc tgcaagaaac
                                                                      300
caggetgeec aaaagtttac caegeagact gteteaatet gaecaagega ecageatgga
                                                                      360
aatgggaatg teegtggeat eagtgtgaea tetgegggaa ggaageagee teettetgtg
                                                                      420
agatgtgccc cagctccttt tgtaagcagc atcgagaagg gatgcttttc atttccaaac
                                                                      480
tggatgggcg tctgtcttgt actgagcatg acccctgtgg gcccaatcct ctggaacctg
                                                                      540
gggagatecg tgagtatgtg cetececcag tacegetgee tecagggeea ageacteace
                                                                      600
tggcagagca atcaacagga atggctgctc aggcacccaa aatgtcagat aaacctcctg
                                                                      660
ctgacaccaa ccagatgctg tcgctctcca aaaaagctct ggcagggact tgtcagaggc
                                                                      720
cactgctacc tgaaagacct cttgagagaa ctgactccag gccccagcct ttagataagg
                                                                      780
tcagagacct cgctgggtca gggaccaaat cccaatcctt ggtttccagc cagaggccac
                                                                      840
tggacaggcc accagcagtg gcaggaccaa gaccccagct aagcgacaaa ccctctccag
                                                                      900
tgaccagece aageteetea eeeteagtea ggteeeaace aetggaaaga eetetgggga
                                                                      960
cggctgaccc aaggctggat aaatccatag gtgctgccag cccaaggccc cagtcactgg
                                                                     1020
agaaaacctc agttcccact ggcctgagac ttccgccgcc agacagactg ctcattacta
                                                                     1080
gcagtcccaa accccagact tcagacaggc ctactgacaa accccatgcc tctttgtccc
                                                                     1140
agagactece acetectgag aaagtactat cagetgtggt ceagaceett gtagetaaag
                                                                     1200
aaaaagcact gaggcctgtg gaccagaata ctcagtcaaa aaatagagct gctttggtga
                                                                     1260
tggatctcat agacctaact cctcgccaga aggagcgggc agcttcacct catcaggtca
                                                                     1320
caccacagge tgatgagaag atgccagtgt tggagtcaag ttcatggcct gccagcaaag
                                                                     1380
gtctggggca tatgccgaga gctgttgaga aaggctgtgt gtcagatcct cttcagacat
                                                                     1440
ctgggaaagc agcagcccct tcagaggacc cctggcaagc tgttaaatca ctcacccagg
                                                                     1500
```

```
ccagacttct ttctcagcct cctgccaagg cctttttata tgagccaaca actcatgcct
                                                                     1560
caggaagage ttetgeaggg getgageaga ceccagggee tettageeaa teecegggee
                                                                     1620
tggtgaagca ggcgaagcag atggtcggag gccagcaact acctgcactt gccgccaaga
                                                                     1680
                                                                     1740
gtgggcaatc ttttaggtct ctcgggaagg ccccagcctc cctccccact gaagaaaaga
agttggtaac cacagagcaa agtccctggg ccctgggaaa agcctcatca cgggcagggc
                                                                     1800
tetggeeeat agtggetgga cagacactgg cacagtettg etggtetget gggageacac
                                                                     1860
agacattggc acagacttgc tggtctcttg gaagagggca agaccccaaa ccagagcaaa
                                                                     1920
atacacttcc agctcttaac caggctcctt ccagtcacaa gtgtgcagaa tcagaacaga
                                                                     1980
agtagtacca atcaatgtca catgaacaaa caagctgccc ccagggtacc atttggggag
                                                                     2040
gggaaatett ttetttettt ceeeettaaa aaaaaacaca tetgeeeega acaettteee
                                                                     2100
actgttattc tttcctcata tcccaacact cagaactctt gtgacattag ccagtggggg
                                                                     2160
                                                                     2220
cttatggttg tgtgaaccat gtatgaaaat ccagtgggcc ccaaccaagg agacagacag
acttgggtet ettteececa actttteeae atggteateg tgaaataaaa agteecetet
                                                                     2280
ggaaaaaaaa a
                                                                     2291
```

```
<210> 5192
<211> 857
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (860)...(219)
<223> similar to gi455834 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5192
ttttttttt ttctggacat cttccatttt atagaaaggg aaattgaggc caggggttgg
                                                                       60
ggaggcctgg caaggaacat ggtgcatggt aggtggcaga agggacctct gtgctcagag
                                                                      120
etgtgeetea ggacceateg tteagatggg aagaetgagg ttggggaggt gtgtettggg
                                                                      180
ttaggaaget gggetegggg caggggteag egegggeatg geaggeaegg tgaatgtgaa
                                                                      240
etteteagte tggacaaagg caacgeeett etcatagtag geageetegt taatgaacae
                                                                      300
ggggtacace gtggaetete ceteatagag caggteetee ecaetgaaca tetggaagat
                                                                      360
gggagcacca ggctgcagtg gctggaagtc teggtcctgc agctgaggat gcacagtgcc
                                                                      420
tgccaggtgc ccggcctcgg tgcgggggaa gtccacgacg cccacgggtc tataggcttc
                                                                      480
catctcaaag gcaggaaagg ccgtaccctg gttgaagagt tcgatgaagt ccagaactgt
                                                                      540
ggccaccagg gtcctcatcc ttgagaaaat gtcagcccgc agcacaccct gtggctgggg
                                                                      600
geceagetee agacecagte catttttgge cacagagtee aggttgtage tetecteece
                                                                      660
agaccgctgg tacaggaaga cctggcagga cagctcgggg tactgcagct gcagatggcg
                                                                      720
gcacaggtgc atggcaaaga cttcgtggga ggacttcgcg attaagcagg tgcccatgtt
                                                                      780
ggccgtggtg ttgtgcaggt caaggacaaa gtcaaaggcc tggcccgagg ccttgggccc
                                                                      840
cagcagctgg ttcagct
                                                                      857
```

```
<210> 5193
<211> 1598
<212> DNA
```

```
<220>
<221> misc_feature
<222> (1079)...(831)
<223> similar to gi2276319 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5193
togaccoacg cgtccgcca cgcgtccgaa aaaaaaaaat gttgatcctg tottggtccc
                                                                       60
cetaggated gtetttett aegtttgeeg etgteteece teateceea ggttgetagt.
                                                                      120
taattetete eestegtgee tgeaceetge tgeectaget ageetggeea ceteactgee
                                                                      180
gtgtcctgca tcaggccagc cacagagtcc tacaggtccg gggcttgctt gtgggaacgg
                                                                      240
                                                                      300
cttgttcttc tagactctgg gggcgggggc ttgggtgtgt ttccttactt gtaaaaggtc
                                                                      360
ctgttgtttt tgggagcagg gagtaatggc ggatgagacg ctgtgtggag gcggcagctc
ctggtatggg gtaacgccct gtcccctcat tggcaggtgg tttgcatgaa gcatcaggcc
                                                                      420
agagggtgtg agtgccaagc cctcacccca catgctgctc ctgttaaaag caaactccac
                                                                      480
tgacccccc gggaagtcag gatttgggat ttacttcctg gaatgcttgc ctctggctgc
                                                                      540
                                                                      600
tgggaattgg ggcctttccc caaagcctga accaggcctc acagtggcca tcaggcacag
aatqqatqqq cacaqctqaq tqqctccact ggctttaatc tgccccacct cttccacacc
                                                                      660
                                                                      720
aacctccacc ctctggttcc gatgtgcttg gttacaaagc acctgattat ttaagagaac
                                                                      780
gaaaaaccac caccagttcc tgtaaagaat aagtcacagg tgcacaggtg aagggctgag
                                                                      840
ttgtggtcca gccccaggga gtgtgggctg tgaggcagga gcgagctaaa cctgtaggag
cagegocaeg getgecagga tecaettege tgeettetet ttggtettea agttaaaggt
                                                                      900
                                                                      960
ccagacatag gtggggccgc ggatgcgtgt tttgtacacg ggacactcat agatgttctt
ggtctccatg cggtccacag gaatggcctt gatgaagatg acaggcatgg ccggggtcag
                                                                     1020
etettteage egegetteag egatgaetee agtetgggtg teccagegag eecetgeagg
                                                                     1080
                                                                     1140
gacagtatgg ctgagggtca ggtgtgctgc cagtaagtga gggaggggct ggcaggaagg
                                                                     1200
gtggggteet caeaeteece geeetetgea gagetggget etaceceaaa aggetteagg
ccagctgcca cagctggaag cagaggcctt cgtaggtgat ggcctgcatg ttgtaactac
                                                                     1260
cccgtcccgc tgggctcaag gaacagctca gctaaagccc tcgggttcca tccgtttaaa
                                                                     -1320
totgtggcat tttcagagco toatotgtca goottaatgt cagtggcagg aagtcataac
                                                                     1380
tccagctaaa aattacagag taaagttccc tgattcttaa tgtgtaatgt ctgccctatg
                                                                     1440
tgtacataca caatataatt atacatctgt gcatataaat attgccttta accagactgc
                                                                     1500
tattatttct actogoccta tttaatggtg tttttatttc ctgtctgaaa tctcaaaata
                                                                     1560
                                                                     1598
aacaaacatg gagagcttaa aaaaagtcga cgcggccg
```

```
<210> 5194
<211> 990
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (990)...(861)
<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5194
                                                                       60
tcagatgaca gtaaacctca gagttgttat aaattaaatg gatataatgt gtgtaaagca
cttagcataa tgctttatac atcgtagaac tttcaaaaaat aggagtagta attattacaa
                                                                      120
aqaaatgtga agaagagtcc tagtgggctg catgttaaaa atagttttta gttaatgaaa
                                                                      180
                                                                      240
attaaatcac atcttagatg tttatcatct gcatggtact tttctggttg ctgctttaac
ctttgtatag ttgaaaggct gtaaactttc tagtattctt tgatttctgg cccatttccc
                                                                      300
                                                                      360
tcctaccatt cacgettata ttttttggtt caagtcacca ttccttgcaa aactaattaa
                                                                      420
atacatteet aaatacataa tattgeeaat atteatteae ateeaeeaeg tetagateea
                                                                      480
agticticate tiettiatge tggtetaatt tittgetgage ettagaagea aagacagaet
                                                                      540
ccgggggttg atatgggacc tccagaatgg ggattgcaca gaataatctt atttttcctc
tattetteta ggetgttatg ttetgaacce acacatgttt teggaaggae cagatggetg
                                                                      600
                                                                      660
acactggcta atgggaacca aaagacgagt gaaagtaacc tgggttgtca cataccccca
                                                                      720
gettagaggt getteaccet geeceaaggt caatttettt tttetetaga gaetttaece
                                                                      780
cattatatca aaaaccttta ctacagcctg actttatctg atgttagagt atcattaagt
                                                                      840
caagcagcag catttattga gtgaaaaaag attgtacaca ggactggaag agaagcatct
                                                                      900
gcctttaaaa tacagtagaa ggccgggcat ggtggctcat gcctgtaatt ctagcacttt
                                                                      960
gggaggccaa ggcaggtgga ttgcctgagc tcaggagttc gagaccaccc tgggcaacat
                                                                      990
ggtgaaaccc tgtctctcct aaaaaaaaaa
```

```
<210> 5195
<211> 916
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (600)...(398)
<223> similar to gi4468339 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5195
                                                                       60
ctgtggcgga attcgaacgc gggagaagga cgttgcagtg agccgagaac gcaccactgc
actocagoot gggogacaaa tgacactoca totcaaaaca taaaaatata aaaaatgttt
                                                                      120
ggetttggaa accatgeeet getgettaac etactgegte etggggeagg tteettgtea
                                                                      180
tetetaaget geagttttet catettegaa atagttetaa geeecetat ggetettttg
                                                                      240
ggtttcagag tttgtaatat agcgccttta ttctccacac agagcaggca ctcacaactc
                                                                      300
                                                                      360
tectttteca etgteetete ttecetggte tetgatetet egagecatee taatteetgg
acceptigea gigietige cagetigget tecceageae igiectecae etectiggeea
                                                                      420
cagecetatg cacetgeage ggggeeeact gggeaggtge tggeaetgge etceatggte
                                                                      480
acagtagece etactgeacg gggacaegea ggtgaageeg etetggggge tgtagaecag .
                                                                      540
gtegtagece tigtagecat egeatetgaa gtaageette agegtgetea egiteaetgi
                                                                      600
cgggaaggac acagattaac acagaaagca accgatgaac actaaatcag taccttttca
                                                                      660
                                                                      720
gccacgaatt ccttttcggg tgtttatcct gagaaataat tggagaagtg cacagataca
tatgeceetg gaegtteaga teagegtggt ggataatagt aacgttteag aagtagggte
                                                                      780
tggttaaata aactactgca catcettace aagggatggt getteetagg gaaaaagttt
                                                                      840
cctagggaaa aaggttcctg tggaaaaagg ttcctatgga aaatgctttc ctgaagagca
                                                                      900
catgctttga aggtgg
                                                                      916
```

```
<210> 5196
<211> 1404
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (18)...(438)
<223> similar to gi5777952 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5196
cggcttccat gatggctgag gaaacgcgca atcccctgag gaacaaagac ttccaggagg
                                                                       60
tgacactgga gaaggaggge caggtgetge tgeacttege aatggegtae ggetteegea
                                                                      120
                                                                      180
acatecagaa cetggtgeag aggeteaaae gagggegetg eecetaceae taegtggagg
teatggeetg ecceteagge tgeetgaacg gegggggeea geteeaggee ecagacagge
                                                                      240
ccagcagaga gctcctccag cacgtggaga gactgtacgg catggtccgg gctgaggcgc
                                                                      300
ccgaggacgc gcctggggtt caggagctgt acacacactg gctgcagggc acggactcgg
                                                                      360
agtgtgcagg tegettgetg cataegeagt accaegeegt ggagaaggee ageaetggee
                                                                      420
tgggcatccg gtggtagggg ctgcaggacc aggactccca ggaggccgtg tccatgtgtg
                                                                      480
acagcagaac cacatgcccc aagaccccag ggctcccccc aaaattctga gtgagctgca
                                                                      540
gggtgtgctg ggacccgagt aggagctagg actagccagg acccgcagcc gcctcgtcac
                                                                      600
etceagttgg gtgeetetgg gtteecaetg getetgeeca ggtggggtgg ggtggeecag
                                                                      660
gcagcagaag gttccctgag gtcccagagc ctgttccgtt ggccctgggc cgaggcccac
                                                                      720
aggtgetgee ettgetgetg etggteggge acceaagtge gtgagggget teageetgte
                                                                      780
eeggggttge etgaggeaga geaagaeggg tteteaceee tgaettetgg aggetteeet
                                                                      840
tgaagetetg tgeaaaaggt gggagaeaga getggaeetg eaggggtggt eeegeeacaa
                                                                      900
ccctgcgtgt ggaccctggc agggggggt gccaggcccc tggaaagcag gggttaccgt
                                                                      960
tacgaggetg tggteegggg caagecaagt aegaageage agecategeg ggetgeatea
                                                                     1020
tececcagee aggtececae caggeetgte teceagegtt tgtetaataa aegeaeeeet
                                                                     1080
cctaaaacac gcaaaaaaaa aaaaaagggg gggccgtttt aaagaaccct tggggggccc
                                                                     1140
aaattttacc cgggcttgca aggtaaaatt tttttcctta tggggggcct ttttaaaacc
                                                                     1200
tacttgggaa ttttgggaaa gaaccttttt tttggggggg ggacatattg ggccaacctc
                                                                     1260
cctacaaaaa ttaaaggctt tagggaaaat aaaaattttt aaagggtaaa gggggtaaaa
                                                                     1320
caacctgcat ttccttgctg ttgaaaagtt ttttttccgg gttttaattt aaaaaaattt
                                                                     1380
tttccccggg ggggggttgg,tttt
                                                                     1404
```

```
<210> 5197
<211> 3111
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3113)...(2657)
<223> similar to gi4699963 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5197 60 aggagaatga agacatggta caagatgcgc tgcagcagaa cccgggcgcc ttcaggctag etecegeeet geetgeeegg eeceaeegag geetgageae gtteeegggt geegageaet 120 180 gcctccgggc ttcccccgaa gacccacgct tagcggtggc ttcttcgttg ctgtaattga 240 acgggtccaa gttgccgacc tcagcctcac aggccaaagc atcagcacca gaacgcacac ccagcccagc cccgaaagag aaagaagaga gcaaaaagct gcagccggtg cttgcacacc 300 gccttgcaca tagcagaggc tccgggctca ctccttcctg gtggaaaagg aagatgcctg 360 tecteteegt ggaggaeeet gggeeeteae egcaggeage agtttgetgt tttgaaaggt 420 480 tattgggtcc cttcctcggg ctgtqttctt gctggtgagc aaaaqtqttq cctqcagaaa 540 taaaatgcag aacgtactct acgatagatc acagtttttt attcttaatg tcacaagcag 600 gagaaaaatc tcacattcat actaaaaatt ccaactagac tcaacaggaa tgaagtctct 660 atttgtaatg gaaagteeca geeteeeget geegteeagt gegtgtaetg tacacateea cactcattct cactcagggt tcccggaccg gctgtcctgc ctgcggaact gaggtaaact 720 ageteaggta etgacaetag gagggtetae ettacataag gtacaggtag aagettgatt 780 getaggecca ggeccaecca gaccetecaa teetaacagg tatttagget tgaggtteac 840 teceteetea getgeacaeg eagecaggta ttaacgagga teagagetgt tetgaggggt 900 gggaaggagc agccccgcca ccactcactc accctcagtc acatcgggga gggggcacca 960 1020 gttacattta catcacatta tttataaaat aagaattaca tttcatataa catggccaga aggageteta gtececeagg aaagetgeeg gggacageat ttgageetet tetttgeaca 1080 ggcataactt aactatacag ctaattccta gttaatagca tttatactta accacctcaa 1140 tgaaccaagc ttgaaggaat ttaaaaggca atttagctta aatacaaaaa taaatttttg 1200 ttaaaaaacg tttaaatatt tttttctttt aatttagaca cacgcattca tacttctccc 1260 aaagaggttg ggcgtggcag caaggcgctt gggcctgggg tatgtggttt cagaaggacg 1320 gaaggaaagg atgggctgca gagggccctg tttgggaaaa ataggatttt aaaaatatgg 1380 ttcattaatt taggttttct aacatctact ttgggtgatg tagcctccag tgaggtcagt 1440 1500 taagtgggac agaaacggca gagggaagag gtctttgctt cccctgggcc cattctccct ggetgeeage cettgaagte agaacaccat gggaaaatte aggagtegge aettgtagee 1560 gtcaagtggt gctactttcc acattcaatt agcgaggccc cagaaaactt gaaacaggaa 1620 ' gtccggcact accaacatgc cgccactcat acaactcaac tettecteca aactcgatte 1680 aaagagcaat acacagagcg tcagacaaag gaacacagga caaggcttga aacatacaat 1740 cctggagagg cagacgaggg cccaatgggg ccaaagggta gctgggcgag gaggcagctg 1800 aagcagcggt gggcatcctg cctgctccaa gagcttctcc cttcacccct ggctctgcca 1860 ggctaacagt cttgagccac caagctctga ggggccaaac tggcagaggg ttggagatga 1920 aacattgatt caggettgge aggaagaaaa eggeaggage ageacecaet ggggteteca. 1980 aggcaaagct agattcaagg gcatttaaaa aggagggaat cctgcaagga actggtgagg 2040 gacacagcag caagaaatgg ggaaacagag tccccagaag ggaccagagg aagagaacca 2100 cttctcacag ctaagccaag caagataaag ctttacggat agcccatttc ccaaatccca 2160 teaggtgeac accacegate caggeggget ggaceetgee ecetecageg acgaeggtet 2220 cggggaaagg tggaaggggc gcctgcctaa gggtgtgcta agcgggagtc agggcagcgg 2280 acactatgta caggtgtttc cttagttctc cagcctcccc agtagaactg ttcaagtaga 2340 ggtcccgggc tttggccctc cgcatcctgc ttccccttcc ctgaggcttg tgcttcctcc 2400 agaagggaaa gggccccagg gctgccactg ccccctggcg gctgaagcca gagatccggg 2460 gtaggtttgc tttacgcaac tggaagggtc caaggctctt cctagcaggt gccaaggtcc 2520 agatttaggg aaggggtggg gggaacaggg acaggggaca aaggctactt tttgcgggtg 2580 tgctgccttc gggcctgcag tcgctgtcga gcccctgggg tcttggatcc cgcaccaatg 2640 gaaaatgaaa gggccgccga tccgaaaggt gcaacaccaa caaagccttg ggcgggtgct 2700 gaggatgccc caaaggagag getgetgeet gatgtgeeca etecaggege aggggtgtte 2760 agaccaaagg tgggggtggc ggtgcctcca aacacaggtt tgctctcagt tgtgctgctc 2820 acgttgaagg caaacggtgt gctctggccg gtggtgccca gggcgttttg acctaagccc 2880 cctgcgaagg gggtggaggt ggctgtgctc ccactctgtc ctgctccaaa gctgaaagct 2940 ccggtggtgg tgctggagcc tggggtggcc acattgatcc caaagctccc actgccagcg 3000 ggggctgccg aacccccaaa cgtgaagggt gatggtgttg tgctgcccaa caccgagctg 3060 ctgctcccgc tgctggcggt ataggtggtg gctccaaaac cggagctggt g 3111

```
<210> 5198
<211> 2169
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2150)...(1754)
<223> similar to gi1732423 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 5198 ttttttttt ttgatatttt aacaaacgtt ccctttatta ggtttactga ctattatcaa 60 cccatccata aaatagaacg ggagtttcaa aactgtacaa gccacaaggc tctgggctgg 120 taggaaagaa gggtggggtc gagggtccca gggtgtcggg gggtgggaga tgcagagaga 180 gctagagggt cacceggcat etgtgaggac ggetgggtca aggccataag etgggatetg 240 tacaagggaa acattcatca gaatgtgacc cacctgaaac aggagggagg aaaatcttta 300 aaaagtetta caggtaaggt ceeetgeeee egaaaaaaaa aacegteaaa ataataaggg 360 ggtaatgtac atttctcacc cagtcttggc accaattttt gtgctttaaa aaatatactc 420 cactgtaaga tttacttaaa aaaaggtact ctacagcagc tgtttaaaac ataattctta 480 cagacaaata tatatatatg tatgtatata tattaaacat tttaaacaaa taaagtcatc 540 tattgtacct gtgcagaaat gaaccaaagt tagactctaa gagagttaac ttcaagctca 600 aagaaatggc aaaggcggtg gcaggtgctg gggtacgcta cgtggagggg ttgccaggga 660 tagggcacce etetetteeg geageegage tacecetett gaggetetga gaggggttgg 720 gatgaactgg ggctgttacc ctgggtecag agccccggct ggggtgctga gcagagaccc 780 gegetggett etgtgagget egactetget eetggtette eccateceae eetgeeeetg 840 getteteggg gaatggagae eeaetegeee teeettetta gttetggggg teetetggea 900 cacccagage ttctgaggat gcccttggga aatctcagct agaaaagcaa aagcaaaatc 960 aaaaccccac atcaaaagac cccacagaag actaaagaaa tgcaaccctg tgcaagggtg 1020 cetgageeca agagttaget ggttacetgg agacacaggg gaattgetge agecetteea 1080 gacgggcccc cgaagacacc cagattgcac gtgaggctat ttetecetga ggggcccgct 1140 agggaacttg gagcagagcc ccctggaaac tgcagggcaa gggacccaga gacatacttg 1200 tgcctgggca cgtgtgcaca tgtgcccagg gagggcgggc gaggcataca tatcccaggg 1260 agggcacagg tggaaggaaa gtaacagaac agccagagag aggggactga aacagggttt 1320 cctttctaga tggaataaat aaatggcttt tgttattgtt aaaagaataa atacagggta 1380 cggggcaccg gcagccagga tgggtgctgg gtgcttattt gcctgcagac agttcttggt 1440 ttetgeettg gggteeatgg tgagtttttg aegteetgag etttatetgt gtetttttte 1500 1560 aaagaggggt tgtatatgga cggcatgcag ggatgctgcc ttccgctgat gtcgggaagg gggaaagagg agcctgtgtt ggaatcggtc cttgtcccat ggaggcagcc acggaggatg 1620 agggaagacc agggacctet gtecatgget aeggatgeeg gtecaaggtg eagggtgegg 1680 cggccccage ggcaggcggc tcagtgagtt ggcaccaggt ggctgtcgcg ctggcggtat 1740 gatggcgaac gtcactggta gaggaggtag gccttgaggg aagccggcag cggcagcgtg 1800 tggatctccc ccaggcgctc cctccccagg gccaggcgca ccgagcgacg gcacaaatcc 1860 atgageggea geggeteggg ategagteeg tteaagtage geatteggat eteaeagtgg 1920 ccccagacgg cactcactac aggatacagt tttttgccct tgagtccccg aaaagccact 1980 eccatgtact gtecatecae aatgaagete agagteeegt egtecatgte eagggetace 2040 aggaaggagt cagggacaat gaatgtctca tctggttcca gaaaggctgg gtatgttttg 2100 cttggctggt tcttgccatc gtggtagagc cggttgcgcc ccaactcgtg ccgaattcct 2160 gcaggcggg 2169

```
<210> 5199
<211> 1322
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1325)...(678)
<223> similar to gi517115 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5199
tttttttttt ttgggtggtg aaggagtgga tttattggag cacaaggcag tgaagcagca
                                                                       60
                                                                      120
aaagtgaaag tacattccac agggtgggag tgggctagag caagtggctc aagagccctg
gtagcaaaat cttctggggc ttaagtaccc tgtagaggtt tcttgatggt tacaccctat
                                                                      180
gtaaatgaaa gactgactca cagccaatta gagactgagg tgaattggct cacagccaat
                                                                      240
ccaagactgg tgtggtttga ctccttatgc aaatgaatgt cctggaatga accaatcatt
                                                                      300
ggccagagtg caggtctggc ccatggccaa tcagaggctg atgtggtttg ataccttatg
                                                                      360
caaatgaagg teetggaatg gaccaateae aggecagtgt teagaetett cagtgecagg
                                                                      420
gagtgtgtcc aagtcatcct tagatcccta tetetgtace ctattetect geetcagtet
                                                                      480
tgtgtgagat tttgcaccct ttgaccatca tcatcatctc cccattcccc caatctctcc
                                                                      540
ctcaactact tctaaccact attcattaat ctcttgtatt atttaggtgt aaggaagaac
                                                                      600
agaaggatee aagtgtgaga aageeeaeee tgagtetete agaggtgatt atgaetgtgt
                                                                      660
gagcatgggt gagacaaatc ctctgttgtt gttgatggct acttgaagtg cttcctccat
                                                                      720
tettteeatt gtagaataet tagggaggga gagaatatta tgacaagtta ttgatgttgg
                                                                      780
gtgatctctt tcactgaaag tttcaggaca gcgaaatact atttccattt tctgtatgcc
                                                                      840
tettgeatge agectateae gteetgtaag gaaaaagagg aattttttet tttcatecaa
                                                                      900
ggttagtttg tggaaagcct tccaaaacaa ctgtatagta ggatgtgatt tttggtatcc
                                                                      960
ttgctcatac tttgaattct gttcaaactg tttccagtca taatcagtat ttccaatgat
                                                                     1020
tgctgtcatt agttcttcag ggtagaaatg tctaagtatc tccttctcac agactctata
                                                                     1080
aaateetete tgaaatteet cataaactge ttttacagag acgttgaaaa tgtaateaat
                                                                     1140
atacttagaa acatagtoto tottgttggt ttggtocaca ggtatggaga toccatttgg
                                                                     1200
aattaagtca acatcatttt ggtcccagtg tatagaaaag cgtatgcaga gcgcatctcc
aatgtcatca gcagcatcat ctagaacttc ttgcaaactc ttccccaacc gaggactgag
                                                                     1320
                                                                     1322
```

```
<210> 5200
<211> 1736
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (942)...(352)
<223> similar to gi212530 in the genepept database release 114,
```

```
<400> 5200
                                                                       60
ttttttttt ttcgaacctt gtggtttttt atttgacggg gcagatggag tcagtacaca
ataaataaca tgaatatagg aactgcgccg tatcgcggct ggcggggtgg ggcaagacat
                                                                      120
tggccagacc tttagtctgc agcaggacag aaggacagcc ggacccctga tcttgggcaa
                                                                      180
ctggcgaccc gcggctggga accggggcta actcttccct cagagttcca cgcgcgcatc
                                                                      240
                                                                      300
geggtaggee eggteeagag eccaeteggg etgtgagteg gtgeeceett etegggeaag
gegggecate teetgtttgg aacageeget tgeegegete ggetggggte cacattaate
                                                                      360
cagttgttgg caatccactt ggtgccgcgc gtgaccaggc agcccccgtg cagcgagtag
                                                                      420
ttgtctacgt cacccaccca accttgccca tcaggcaggt agttgtacca gaagactgct
                                                                      480
gtgccctgtt ggggcttgac acgcaggttt cccttgtcac agtgcctccg tgtgtcacgg
                                                                      540
aggtccacgt catcctgaat cagactcatt tcatcgtagg ttctgttatc tgctacaggg
                                                                      600
aaaacagtet egeececace agtgaegttg tteaaataaa acageactgt catgtagegg
                                                                      660
caggaggtet cgaagggtac agactegttg getaccaget tggtatggga geagatggte
                                                                      720
                                                                      780
totgggtaca caggeceact gtecaegtgg geatggtagt ggeceeecte accatatega
                                                                      840
acaacctgca gcggctcgct gagctccacg atctcaggcg acaggcgagt gaggcgcagc
                                                                      900
accetetgge ggatggeacg catgatgtgg tgggeaccet caccetggta gagecaggta
                                                                      960
tggtggctgt tccgcaccag ctcactggac tctgccttgt ggctcctcat gtacttgtgg
                                                                     1020
aagtcccgaa ggtccatgtt ggagaactcc tgcagactca gcactccgtc accatcaggg
                                                                     1080
tcagccttga tcgcggcgta catctcctga atgctctctg gagtcatcca ccatccattt
cccaggcgag totgggccag aacctcacgg agotgaaggt gcccatcacg gttotggtcc
                                                                     1140
                                                                     1200
ageageegga agaggteeag etggetgace tgeatagtge teattgeete tteatactet
tcagtaggca ggatctggct gcgctgtaac cccttcatct gcgccagatg gatgatgagc
                                                                     1260
cgacactett catcagteag gaageegggg atttegaaga geageggett gaggetgagg
                                                                     1320
                                                                     1380
gttcggatga agtgatccct gtcggtgacc agctggacct tacgctcgtg ccccaccttg
                                                                     1440
atgccctcca gccgggtgag gggacctaag gtgggctcgg gcccggggcc ctgggcacgg
                                                                     1500
tgttggggcc cgggatcgct gctttcgtcg ccgttgctgt agtgcacgaa gagcagcagc
gccagcacgt tacccaggta caggtgcacg aacaccatca gcaccaggaa gtaggcgcgc
                                                                     1560
                                                                     1620
gagcagatgc cgcggggctt gcacagcgga cgcaccggtg cgtcctcgcc gtcgcccagc
                                                                     1680
acggccgccg cctgagcctg gcagtggtct ggcggcgccc actgcggcct cgaggcctcc
                                                                     1736
togtécheeg eggteteaga ceggtgaeet gteacegeeg étgeegeeat ggeace
```

```
<211> 1203
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1206)...(1089)
<223> similar to gi2565048 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 5201

```
<400> 5201
tttttttca gcttttcaga agttttatta taaagagatt tgagagaagc actgggcacc 60
aagacagaca ctcgccaggg ccaggaaaca gctgcaaacg acgtcaagaa cccaaaccca 120
```

```
aacgaaaccc caaaaccaca cacacggtag gataagctgt aacttcgttc tcaaggtttc
                                                                      180
ttcataaata gacaaaagtc gtcgccggca atttaaaata gatgaataca tgattaaaag
                                                                      240
gagagcagtg ctccggggtg gctagcaagc gtccggtcct tgctgtgagg atgacgaaac
                                                                      300
ggtttggcag ccgcttttgt gcgcgtctcc cttaagataa aacttaaaaa tgtgctaagg
                                                                      360
atcatataaa atgcttttta ccttaaaggg aaactacttt tttcccccac aaaatagtct
                                                                      420
                                                                      480
tacagatggt ctttcagcac aggttctaaa acacgtaggt caactactta cacggaaccc
                                                                      540
acaggtttct aggtttcgta atcttttgtt cacactggaa aaccgatggt gcacatctat
                                                                      600
gccgggggcc gggccctctg gcccatggca tctggggtgg gtgtccgttg gtaagcgacc
                                                                      660
ccqccagggg cggcccacct gggctggggc tggagctggg gccgggtgtc cagacatagg
                                                                      720
gtaccgtgcg cagggcgagg acagggtcca cagttaccct ggagcaagca ggtcagcggg
                                                                      780
eggaaggtte etgeaggtte tttgggetgg tggtgggeag tgggetgeet etgeagagte
                                                                      840
tggtgggagg ttgaggaaga gactcagccc ccgggcaatg ggtgtgtcac tgctctctcc
gatgggccac cctgcctctg gccagggcct cttttctgct gtcagccctt caggctctga
                                                                      900
gcagtgcctt ccagcgagcc tcagggatgg tagggaggcg ggattaggtg aggtagagcg
                                                                      960
atttgtccct ggggagcagg ctgcaggtgc tgatgccaca ctccccactg gggtagctgc
                                                                     1020
                                                                     1080
tgtcccagtc cccgctgctg gtggggttgg atgggccagg tgagcaggat cccgagctgc
tggggaactc agagatgtgc gggaagtcct gcttctgttc ctctcccagg ctgtcccaca
                                                                     1140
                                                                     1200
tggaggccac gattttggac acgtcaccga aagtggcact ggggttctga cccttgatgg
                                                                     1203
```

```
<210> 5202
<211> 566
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(171)
<223> similar to gi3342738 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5202
aagaaqatee tqtqccqcct tttccggate tttqtccacg tctatateca ccacttcgac
                                                                       60
                                                                      120
egggteattg tgatgggtge agaggeeeat gteaacacet getacaaaca ettetattae
tttgtcacag agatgaacct catagaccgc aaggagctag agcctttgaa agaaatgacg
                                                                      180
                                                                      240
ageaggatgt gteactaatg etecacetea ecetttggaa gaaaggaaag etgttteete
ctggtgccct gagcggcag gaggtggacc accetggctg aaatgacaca cetactecca
                                                                      300
ggaacagcag aggtggaggc aagcagtgac tcctgagaga cattccccac tcactttgtg
                                                                      360
                                                                      420
tgctcttaac cttctgagtg ctgctagccc agacctgtgg acgaggcaga ccacaacgtg
                                                                      480
aaagaaggac cagcccttg accgttctgg ctggggaatt gtccacgagg aagcctctgc
                                                                      540
acttccacac atggcacagt tetgcetgtg acetgcegce taagetttac tggaattcag
                                                                      566
gttttgagac tgagatgcgt gttcga
```

```
<210> 5203
<211> 456
<212> DNA
```

```
<221> misc feature
     <222> (6)...(279)
     <223> similar to gi3878325 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5203
ataacttctc acagcctggt ggcctcactg ggcccctcaa ctactaccga aacctcttca
                                                                       60
ggaacttccc cctggaaccc caggagctga ccacacccac attgctgctg tggggggaga
                                                                      120
aggacactta cttggagetg gggetggtgg aagceategg cageegettt gtgeegggee
                                                                      180
gettggagge ceacateetg ceaggeatag ggeattggat cecacagage aacceccagg
                                                                      240
agatgcacca gtacatgtgg gccttcttgc aagacctgct ggactagtgg tccttgctgg
                                                                      300
cctgcccagg aggcatggat actcaggaag gaacacacac ccattatctg tgtgtgcctg
                                                                      360
ggagtccata caatgtccat acatgggtga actcttgaat cgctcatagg catgggactc
                                                                      420
ctggatccca cacaagcgca cctatgggtg cctcgg
                                                                      456
     <210> 5204
     <211> 1257
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (5)...(698)
     <223> similar to gi1228037 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5204
ctgcctggag gatgctgcgc cattctccta ccatagcacc ttcctgctgg ctgaccgcac
                                                                       60
tgaggcgtgg gtgctggaga cagctgggag gctctgggct gcacagagga tccaggaggg
                                                                      120
ggcccgcaac atctccaacc agctgagcat tggcacggac atctcggccc aacacccgga
                                                                      180
gctgcggact catgcccagg ccaagggctg gtgggatggg cagggtgcct ttgactttgc
                                                                      240
tragatette terrigare agrageetgt gegeatggag getgeraagg ceegettera
                                                                      300
ggcagggcgg gagctgctgc ggcaacggca agggggcatc acggcagagg tgatgatggg
                                                                      360
catcctcaga gacaaggaga gtggtatctg tatggactcg ggaggctttc gcaccacggc
                                                                      420
cagcatggtg tetgteetge eccaggatee caegeageee tgegtgeact ttettacege
                                                                      480
cacgccagac ccatccaggt ctgtgttcaa acctttcatc ttcggggtgg gggtggccca
                                                                      540
ggccccccag gtgctgtccc ccacttttgg agcacaagac cctgttcgga ccctgccccg
                                                                      600
attecagaet caggtagate gteggeatae cetetacegt ggacaceagg cageeetggg
                                                                      660
gctgatggag agagatcagg tatcccccag ggagtagggg ctaccttgag gggatgatag
                                                                      720
acctcccca ctcccagtgg gactctggaa atatgaagga actagggagt ggaagagatt
                                                                      .780
tragagetgg ggagaggagt terterette aaageragea artgeetttg gggaatgteg
                                                                      840
gggggtatet cettteteet gettgtgtga gggggtacae agteceeet teacetggeg
                                                                      900
ggaagcetgt ceeggacaga eteateteag ettteeettg gggeaggate gggggeagea
```

<213> Homo sapiens

<220>

gctccagcag aaacagcagg atctggagca aaaaggcctc gaggccacac aggggctgct

960

1020

```
ggccggcgag tgggccccac ccctctggga gctgggcagc ctcttccagg ccttcgtgaa 1080 gagggagagc caggcttatg cgtaagcttc atagcttctg ctggcctggg gtggacccag 1140 gacccctggg gcctgggtgc cctgagtggt ggtaaagtgg agcaatccct tcacgctcct 1200 tggccatgtt ctgagcggc agcttggcct ttgccttaat aaatgtgctt tattttc 1257
```

```
<210> 5205
<211> 385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)...(135)
<223> similar to gi5713131 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5205 tcgacccacg cgtccgcttc aaggtctggt gtcctggggg tctgtggggc cctgtggaca 60 agatggcatc cctggagtct acacctatat ttgcaagtat gtggactgga tccggatgat 120 catgaggaac aactgacctg tttcctccac ctccacccc accccttaac ttgggtaccc 180 ctctggccct cagagcacca atatctcctc catcacttcc cctagctcca ctcttgttgg 240 cctgggaact tcttggaact ttaactcctg ccagcccttc taagacccac gagcggggtg 300 agagaagtgt gcaatagtct ggaataata tccctcctg agactgaacc aaacaaaatc 360 cttgacaaac actgaaatta taaac

```
<210> 5206
<211> 2551
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (251)...(738)
<223> similar to gi4680224 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5206

tttcgtggga aacttgggta tgaacctggg aagagggact tgaggcctca ctgggcattc 60

tctctgcacc tgtggcattg gagaagaaat cagaatttgc tctgtggggt taagggatga 120

aatgagtgcc cacctgcaca gtctaaggat ttaccatttt cagccggaag tggcctgcct 180

cttcactggt gaacagtccc taaatttcca gccttggtct cacaccaact ctctggattt 240

tctggccgca ggaattggat tcaagtacgt ggctctggga gacctcatca tcctcatcac 300

ttttggcccg ctggctgtga tgttcgccta cgccatccag gtggggtccc tggccatctt 360
```

```
cccactiggtc tatgccatcc ccctcgccct cagcaccgag gccattctcc attccaacaa
                                                                      420
caccagggac atggaqtccg accgggaggc tggtatcgtc acgctggcca tcctcatcgg
                                                                      480
coccaegtte tectacatte tetacaacae actgetette etgecetace tggtetteag
                                                                      540
catcetggcc acacactgca ccatcagect ggcacteece etgettacca tteccatgge
                                                                      600
cttctccctt gagagacagt ttcgaagcca ggccttcaac aaactgcccc agaggactgc
                                                                      660
caageteaac etectgetgg gaetttteta tgtetttgge ateattetgg caecageagg
                                                                      720
cagtotgooc aaaatttaag gggacaagta gotocoocca cgacatgtot cootttotta
                                                                      780
gaatatatta aagtcagagt ctctgaggaa ggaatgtgat ttggcagtca gggtactaag
                                                                      840
catgggtggg aactcctgcc ttataaaaat tgtttttgtg ttcttaaaga taatatgttg
                                                                      900
tttttctgtt ttttgttttt tccattttat ggggaattta aaaaccattc ttgtatcata
                                                                      960
aggtgaatta ggcgcatggt ctttgtttta ttaataattt ccactagagg gtgttctcag
                                                                     1020
gtcactttgc ggtgaagtgg acttagttcc tccttgttct gtacaaaatg tctccagact
                                                                     1080
ttgtaaagga getgeeeagt ttgggeetee tgteeegaaa agaceetaat aactaggeag
                                                                     1140
agtgttgtcc tgctttcttc gtctcgtagg atgtgctatg attggtgcca ggcctcacta
                                                                     1200
acacaggggc tacctgtctc ttattctcag cacctgtgtc ctgagatacg ctgcctgaga
                                                                     1260.
cagagagagt coctcattaa cagcotgtgt ggotgtcago tttttgccta aattgtgatt
                                                                     1320
cagatgettt tgttetetet cettteaett attgecaeag ttgaggaaaa gtgteagatt
                                                                     1380
accetgeage aagacaagee aaggaetggg agggaaaaaa aaaceaetet ggaggeaaet
                                                                     1440
gagaaaatca ctgcttttgg ataggaatca gtagggtggc tgttttccct ttgttgaatc
                                                                     1500
tactagagtg acaggaagga ctcccagccc tttcagtaac tatcaggagc cctgaaacgg
                                                                     1560
tagaggcact gccatccttg tgggatactc aaagcccaca gggcttttcc ctccctattg
                                                                     1620
catcttetga tgetececae acceaecete caeeteteca cetetgtggt gtteceattt
                                                                     1680
gtgtgtttcc catctgtgga gccagactgt ttgagcaata gcttagcagc gagtcaggga
                                                                     1740
cagetgeeac tttecacaga gecacaggat gggeagagea gggaeceagg gaatgaatag
                                                                     1800
ccagtggaca aacagtettg agetetgtte agecagagtg atgggeeetg ccagttaagg
                                                                     1860
ggctgtgtct tcatccttga agacagatgt gcaatattga ccctgcctct ccccagggct
                                                                     1920
ttgtggaaag atagttgagg getttagtga gateacaete agagtgggge aatteeagea
                                                                     1980
tttateetgg etgegtttea ttgeattgte tgtgaagtat aatttetggg ceagaattge
                                                                     2040
tcagttgcat ttgatccagg actatagatt ggaaatgggt catcattgtt ttctgttgtg
                                                                     2100
attatagcca ttctagtagg cgtttaaggt catggcctgc agaaaatgat gtaagaacta
                                                                     2160
gttcttaatc tttcagatca agctaatgat gatatggaac cttgagttcg aattgattgg
                                                                     2220
tttacttgga aaaaaacatg tttgaaaatt gcaaaagttc cgccgggcgc ggtggctcat
                                                                     2280
gcctgtaatc ccagcacttt gggaggccga gacgggcgga tcacgaggtc aggagatcga
                                                                     2340
gaccatettg getaacaegg tgaaaceeeg tttetaetaa aaatacaaaa aattageeag
                                                                     2400
gegtgttgge gggegeetgt agteceaget acetgggegg etgaggeagg ageatggegt
                                                                     2460
gaacccagga ggcggagctt gcagtgagct gagatcatgc cactgcactc caacctgggg
                                                                     2520
gacacagcaa gactccgtct caaaaaaaaa a
                                                                     2551
```

```
<210> 5207
<211> 822
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (138)...(597)
<223> similar to gi5281051 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
aaacggaget tecacaaace agatagaggt tetecagett ttetttgatt gtetetgett
                                                                       60
tagegtetet aaateeggte accatgtegg acceegaagg egagacettg egaageacet
                                                                      120
ttccctctta tatggccgaa ggcgagcggc tctacctgtg cggggaattt tctaaagccg
                                                                      180
cgcagagett cagcaacget etttacette aggatggaga caagaactge etggttgete
                                                                      240
getcaaagtg etteetgaag atgggagaet tggagagate eetgaaggat getgaggett
                                                                      300
cgctccagag tgacccagct ttctgtaagg ggattttgca aaaggctgag acactgtaca
                                                                      360
ccatgggaga ctttgagttt gccttggtat tctatcatcg aggctacaag ctgaggcctg
                                                                      420
atcgggaatt cagagttggc attcagaaag cccaggaagc catcaacaac tcagtgggaa
                                                                      480
gtccttcttc cattaagctg gagaacaaag gggacctctc cttcttaagc aagcaggctg
                                                                      540
agaatataaa agcccagcag aagcctcagc ccatgaaaca cctcttacac cccaccaagg
                                                                      600
gagagcccaa gtggaaggcc tegeteaaga gtgagaagac tgteegeeag ettetggggg
                                                                      660
agetetaegt ggacaaagag tatttggaga ageteetatt ggatgaaggt tteggacaet.
                                                                      720
ttgttggcac ggggccttgg gggaaaggaa atctgggtgg atgcttcatg catgagctga
                                                                      780
aggcagaacc tgtcatataa tattagctga cgtgtacctg tg
                                                                      822
```

```
<210> 5208
<211> 1039
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1039)...(639)
<223> similar to gi4589520 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5208
ttttttttt ttaaaaaaca tgaaagcacg gtttatttgc tcctaaggtt tccctgtgtc
                                                                       60
gtagetetgt agtgegttga aegtgaecaa ageaageaee etgggttage aeeagttete
                                                                      120
cetgtggccg getgtgtggg agggtgggtg geaeggetet gagacceagt etggagggte
                                                                      180
tgtgctgagg ggaagccgtg cttctctgtg tttccgactt tgctccagtc tcttctgtct
                                                                      240
ctgggaaget catggcagga tgetgtttgg tttcaaaget teatgtgggt tetettttt
                                                                      300
ttttctctct ctgtctctct tttcatttca acggcgatga tcctttcccg agaagtatct
                                                                      360
tragtgtett agggaggtra ragraaraag graaaaraat aattaaagta raaragaagg
                                                                      420
tagtgcagtt ctcgctgtgg aaggaagcgg tccgcaggca gctggcccgg gatgcctgca
                                                                      480
cccaggtcga ggctgaagga cggggggtct cggtgttccc gcagctctaa ggctgtggct
                                                                      540
gggggctggc tcaggaagtc atcttcaggg tgatgtgggg gatgcaggtg gaatgcggtg
                                                                      600
aggagaagag gagggcgctg ggctccgggc ccctgtcaca gagtggactc caaagaggag
                                                                      660
tecaagatgt categtgatg getgttgetg ttggagtege tgteataget etgggggetg
                                                                      720
gagtagttgg etgeeteetg eageeteate ageatgttea teagegggte acetteagea
                                                                      780
teactggggg geatetgett gettgtegat eeeteeegag geatggagta geegtegaag
                                                                      840
cegacatect caggeegtaa etgeageagg ggaggeeact egtgetgttg tgggetgget
                                                                      900
gcccatggat atgtgtccat cacccacttg gcaggatect cccaggggge gcgccttcca
                                                                      960
tagagetgga gteettetet gaeggettee aggagatagg ggataatgga atagtteeac
                                                                     1020
aagtcggtga accactctc
                                                                     1039
```

```
<210> 5209
<211> 2061
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (161)...(1451)
<223> similar to gi289760 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5209
                                                                       60
cteggaceca cagageegge ceetgetget getegggeag etgeaceace tgeacegegt
                                                                      120
geeetggage caegteegeg ggaagetgea geeeegggte aeegaggage tetggeagge
tgccctgage acgeteaace ccaaceccae ggacagetgt cccctetace tgaactaege
                                                                      180
caccgtgget gecetgeect geagggtgag ceggeacaac ageceetegg cegeccaett
                                                                      240
catcacgcgg ctggtgcgga cctgcctgcc gcccggagcg catcgctgca ttgtgatggt
                                                                      300
ctgcgagcag ccggaggtct ttgcttccgc ctgtgccctg gcccgggcct tcccgctgtt
                                                                      360
                                                                      420
cacccaccgc tcaggtgcct ctcggcgctt ggagaagaag acggtcaccg tggagttttt
                                                                      480
cetggtggga caagacaacg ggccggtgga ggtgtccaca ttgcagtgct tagcgaatgc
                                                                      540
cacagacggc gtgcggctag cagcccgcat cgtggacaca ccctgcaatg agatgaacac,
cgacaccttc ctcgaggaga ttaacaaagt tggaaaggag ctggggatca tcccaaccat
                                                                      600
                                                                      660
catcogggat gaggaactga agacgagagg atttggagga atctatgggg ttggcaaagc
                                                                      720
egecetgeat ecceagece tggeegteet cagecacace ccagatggag ccaegcagae
categeetgg gtgggcaaag gcategteta tgacaetgga ggeeteagea teaaagggaa
                                                                      780
gactaccatg ccggggatga agcgagactg cgggggtgct gcggccgtcc tgggggcctt
                                                                      840
                                                                      900
cagageegea atcaageagg gtttcaaaga caacetecae getgtgttet gettggetga
gaacteggtg gggcccaatg cgacaaggcc agatgacatc cacctgctgt actcagggaa
                                                                      960
gacggtggaa atcaacaaca cggatgccga gggcaggctg gtgctggcag atggcgtgtc
                                                                     1020
ctatgcttgc aaggacctgg gggccgacat catcctggac atggccaccc tgaccggggc
                                                                     1080
teagggeatt gecacaggga agtaccaege egeggtgete accaacageg etgagtggga
                                                                     1140
ggccgcctgt gtgaaggcgg gcaggaagtg tggggacctg gtgcacccgc tggtctactg
                                                                     1200
eccegagetg cactteageg agtteacete agetgtggeg gacatgaaga acteagtgge
                                                                     1260
ggaccgagac aacagcccca gctcctgtgc tggcctcttc atcgcctcac acatcggctt
                                                                     1320
cgactggccc ggagtctggg tccacctgga cattgctgca ccggtgcatg ctggtgagcg
                                                                     1380
agccacagge tteggtgtgg cectectget ggegetette ggeegtgeet etgaggaeee
                                                                     1440.
tetgetgaae etggtgteee eactgggetg tgaggtggat gtegaggagg gggaegtggg
                                                                     1500
gagggaetee aagagaegea ggettgtgtg ageeteetge eteggeeetg acaaaegggg
                                                                     1560
atcttttacc tcactttgca ctgattaatt ttaagcaatt gaaagattgc ccttcatatg
                                                                     1620
ggttttggtt tgtctttctg gtcgtcagcg tggtggtgga aacagctgaa gttttaggag
                                                                     1680
acagettagg gtttggtgeg ggecaegggg aggggaeegg gaagegetgg ggettgttte
                                                                     1740
tgtttgttac ttacaggact gagacatett etgtaaaetg etaceeetgg ggeettetge
                                                                     1800
acceeggggt gaggeeteet geetgeetgg tgeeetgtee eageeeeagg teetgtgeag
                                                                     1860
ggcacetgeg tggctgaeag ceaggetett actecageeg gggctgeeag egcateeage
                                                                     1920
cageceagee etgtgaaaga tggagetgae ttgetgeagg ggaeetgatt tatagggeaa
                                                                     1980
gagaagtcac actooggoot otcagaatto acttgaggtt caattaaata cagtcacaco
                                                                     2040
gcccctcaa aaaaaaaaa a
                                                                     2061
```

<210> 5210 <211> 1156

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1157)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1156)...(429)
<223> similar to gi4567275 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5210 tttttttttt ttattagaaa tgacgttgtt actaaaaagc cacacaatat cncatttaga 60 gaatatgett aacaaaatat acatettaaa aatteageae teeagaatge tittiteaggt 120 gtttccattt gagaaataaa gaataaaaat tggtaataat tatagacaca acttcataca 180 ataatctgga taatatgcaa gaagcatcat gttgactttc agatatttct ctttgtggct 240 aacgaaccac acatcaaagg atggaccaaa gttcagatgt acacagtcca gggcacctcc 300 aagcacagtg gcagtgccct tggggatttt ctttccctca gtgagagaca cgggggatgg 360 ggaggagccc aggagtgtca ccagaaagta cacaacccag cttcttaccc agcctgctgc 420 catcatcaac tatcaaacca tttgctcctc tttgcaagag gtgctccttt agaaggtccc 480 aataatttet gettatattg ttegaceage tggttgaage gggttteegt ettattteee 540 ttagcttttt tcctagatac ctgctcggac gataattgct gcttctcctg cttccactgg 600 tttatctgtg gctttggctt tttgggatgg acgggcttca ctttgccttt gtcccgcaac 660 ctgattttgg ggcctcggtg tgaggggagc gccaggacct ttcttctctt ctttccatca 720 ggcageteca cetgetecae tteageettg gtetggaace eggtecatga ggtagageee 780 geetttetet tetgetetgg gggeacettg etttgtteet etgtgtggtg ttgagetgee 840 ttötgttget ggtettttge aggetetggt tgeecettet gaggeteace agttgeagge 900 ttggatctca ttttttgcaa gctgcgctgg atccttaatt ccttcatttt aagttttctt 960 cgatcttcta aagagaactc cactattggt ctcttcagag gcccaaagat ttctggattg 1020 ttgttgatga ggcggagggc tttcagggca tgctcgtgct cttggaactc cgcaaaggcg 1080 tageceaggg actgaceett catgttgeca tgaacteett tgaggtateg cateacteta 1140 cactccttga tgcgca 1156

```
<210> 5211
<211> 1766
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1767)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1)...(1098)
<223> similar to gi5732946 in the genepept database release 114,
```

```
<400> 5211
atggacaggg cggcgctcct gggactggcc cgcttgtgcg cgctgtgggc agccctgctc
                                                                       60
gtgctgttcc cctacggagc ccaaggaaac tggatgtggt tgggcattgc ctccttcggg
                                                                      120
                                                                      180
gttccagaga agctgggctg cgccaatttg ccgctgaaca gccgccagaa ggagctgtgc
aagaggaaac cgtacctgct gccgagcatc cgagagggcg cccggctggg cattcaggag
                                                                      240
tgcgggagec agttcagaca cgagagatgg aactgcatga tcaccgccgc cgccactacc
                                                                      300
geceegatgg gegeeageee cetetttgge taegagetga geageggeae caaagagaea
                                                                      360
gcatttattt atgctgtgat ggctgcaggc ctggtgcatt ctgtgaccag gtcatgcagt
                                                                      420
gcaggcaaca tgacagagtg ttcctgtgac accaccttgc agaacggcgg ctcagcaagt
                                                                      480
gaaggetgge actggggggg etgeteegat gatgteeagt atggeatgtg gtteageaga
                                                                      540
                                                                      600
aagtteetag attteeceat eggaaacace aegggeaaag aaaacaaagt aetattagea
atgaacetae ataacaatga agetggaagg caggetgteg ceaagttgat gteagtagae
                                                                      660
tgccgctgcc acggagtttc cggctcctgt gctgtgaaaa catgctggaa aaccatgtct
                                                                      720
tcttttgaaa agattggcca tttgttgaag gataaatatg aaaacagtat ccagatatca
                                                                      780
gacaaaacaa agaggaaaat gcgcaggaga gaaaaagatc agaggaaaat accaatccat
                                                                      840
aaggatgatc tgctctatgt taataagtct cccaactact gtgtagaaga taagaaactg
                                                                      900
ggaatcccag ggacacaagg cagagaatgc aaccgtacat cagagggtgc agatggctgc
                                                                      960
aacctcctct gctgtggccg aggttacaac acccatgtgg tcaggcacgt ggagaggtgt
                                                                     1020
gagtgtaagt tcatctggtg ctgctatgtc cgttgcagga ggtgtgaaag catgactgat
                                                                     1080
gtecacactt gcaagtaace actecateca gcettgggca agatgeetea gcaatataca
                                                                     1140
atggcattgc aaccagagag gtgcccatcc ctgtgcagcg ctagtaaagt tgactcttgc
                                                                     1200
agtggaatcc ctagaacctt ggacctgaga gtttccctta cctgatcgac atattttcct
                                                                     1260
ttatctgatc aacccatcaa tcatgtggat ttcttgggat tctaatgttg aaaaggttta
                                                                     1320
tattcacctt ttgatgattt ggggaatata tattgacata caaggaagat aatctgtttc
                                                                     1380
ctaagcaaga aataacagga aagatccctt atgccaggag gcctgccata ctcaggataa
                                                                     1440
gatccttgaa tatggaactt agttacagga ctcantaatg gtgggtgaac attagtcatt
                                                                     1500
tttaaaagac acctettata geaataagga gacattaaca tgaateteat ttattetete
                                                                     1560
agtattttaa cttgagaaaa tatactgttt gttgtggata gaagatgttg aaaagtaaca
                                                                     1620
taagccatgg tgctgactac cctttatgtc tttcaaagaa ggtaatcana aagatcttct
                                                                     1680
agtgaatata teeetaaaaa agateataeg atgttatgae aagateatat taaaaggtat
                                                                     1740
gaagattaaa ttaaggcttt cctgaa
                                                                     1766
```

```
<210> 5212
<211> 1136
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (29)...(175)
<223> similar to gi2887409 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5212
gaattcccgg gtcgagcttg agcccgccga ctgcggccag gacaccgccg gcgcgcctcc
```

```
eggeegeege gagateegeg eegeeatgea gtttggegae accgaaatta aggteacege
                                                                  120
egtegaegte ageaceaate geteegtgeg egegteeate gaetttettt eeaactgagg
                                                                   180
gegegeegge geggtgeeag egeegtetge eeggeeeege cetetttegg tteaggggee
                                                                   240
tgeggagegg gttggggegg gggaaacgat agttetgeag tetgegeett tecaegeeet
                                                                   300
ccagcccgg gggagataag gtcatgggag agtgggtggg gacacaccca gagactggct
                                                                   360
ttgggattgg gcactggtcc gctgactgcc aggctgaagg gacccgccaa ggactgaacg
                                                                   420
ggtaagagaa gaggtttgca agacagagcg cgcagcccgg caaggggcat gtgaccccga
                                                                   480
aggaagaacg caacagaaga gtcctggtct gaacttggcc gagtaggggt gggggtggga
                                                                   540
                                                                   600
tggcaggagg agccgcagga ggaaggaggt tgtgcagggt ctggacctgc agggctgaag
                                                                   660
ttcactcatc gaccgactca gccccaaccg ggagccaggc agaaaaaccc tgtgccgtag
                                                                   720
780
etgaceacce aaatatgact gtgaattgtg gaaagggeag tagateteta atgtggaggt
                                                                   840
gggaacatta ttgtggtgga ggcaattatg agggtagcat ttctttcgag acaaaacacc
                                                                   900
cgtctgggaa ggccccaagg tcagcttatg aaggacccca cttgcacccc accccagcca
                                                                   960
tggaagagca gctggagggt ggatgggggag gccagaggga gcaatgaggg gtggtcccag
ctctgctatt gactcggtat gcctttagga cattctctta ccgctcatgg gcctcagttt
                                                                  1020
cctaaagtgt gaaatgtcag gcacttccct ctaactggca tgcaacagcc ccacctgcct
                                                                  1080
gagagcccțg aggtgacaat aaaacattta tgctcaaggg gagaatacaa aaaaaa
                                                                  1136
```

```
<210> 5213
<211> 1048
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1017)...(485)
<223> similar to gi5824476 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5213
ttttttttt ttaattaaaa aatgttttat ttatacaaat ggacaatcag aggccagtcc
                                                                       60
cccgtccttg ccttccggct ccagtgtggt gtaccaggtg gccactgcct gctgtcccgg
                                                                      120
caagcacgtc ctcacgctca gctctggccc gcctcgtcgt cactgtcctc aatcagacag
                                                                      180
teceggatet cetgeaagee ceaggeeete tgtgtgegga egtgggeete ageeaggatg
                                                                      240
tacggcggca gggggtccag tgagggtcac caagtccttc atgttcacgc ggcagctgta
                                                                      300
gcacagetge tectcaatge aggetttggg gteeteeete etgeaggeee eetggeegea
                                                                      360
gcgctgggcc cagcccaccc ctggagaaca gcagggcccc gggggtgtcc gggtctcagt
                                                                      420
cagggggatg ggtgactgca tctgggagag acgcgaggag gtctgagccc caaaagccgt
                                                                      480
ggcactgtca geggegtega egteeaggge acacatgeag aggaggeage gggggeegga
                                                                      540
gtegecagea geagggeeat eeegggggee etteaceage tteteaettg teetgtacae
                                                                      600
agtgctgaca gtggagggga actgggtctg cagcctgagg atgaaggcct ccatcagccg
                                                                      660
gtggatgctg gccttttcag gggccttggt gtcgacggct ggtgtgaaga cagaaggaac
                                                                      720
ggagaacagg cggttgtaga aagcgacctc cttcagggtg tggtcccgca tgggccgcac
                                                                      780 -
caccaccacg teceegtgee geteateega gaageeegta teceaggeea ggaaggeeee
                                                                      840
togaccoago gocaggitgg toatgagott gatagocaag cgtgtgcago tgtccccagt
                                                                      900
catgacettg gagtageegt gggeteggge caegtggagg atcaggtggg teegcagggt
                                                                      960
ctgcagaagc tcctccttgg cagtcagtgt cctcactgag cagaacagtt gggaaagagc
                                                                     1020
ctcagtctgg gcaggggcag gcggtctt
                                                                     1048
```

```
<210> 5214
<211> 1053
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (637)...(919)
<223> similar to gi1002786 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5214
aaacaataca cetgteagtt tecateaact atagcaatee atgcagaaga caagaggeee
                                                                       60
cctcaaagca ggaggggtat tgttttaggt ccaatttttc ttattgttct caaaatcatt
                                                                      120
ataaggtgga cagtgttttg tgaagatttt cttttcccca gctctaagaa accatgtgga
                                                                      180
aagaattcat tgataactgt tttgattttt ttcttttttt aagtacaggt tttgctaagt
                                                                      240
aatcaccctt agtgagcctg tgtagttcag ctgcctgtga gatgtttggt gaccagctca
                                                                      300
gtgtattett gtattettga tagagaatat tteaggagae aaaagtgett etteagaeea
                                                                      360
gacctcaaat aacaatttta ttctttttaa taaataagac ctcagtaggc ggacctgata
                                                                      420
acagtgacaa tgaaaggaaa atagtggcaa aatgtgagtt tccagcatga tgtttctcat
                                                                      480
tttattttct tctgtatgaa tcaaaagaat gctttacaaa accatgttcc cttaatcaca
                                                                      540
gtgttetetg gettttatag gattgteata geeaggacea caetattget tttteataae
                                                                      600
attttctttt tgtttctttc ttttgaattt cttacagggc tgcaaagtat gccaggggag
                                                                      660
tatgtagccc ggggtggtcc aatgggtgtg agtatgggac agccaagtta tacccaaccc
                                                                      720
cagatgeece eccateetge teagetgegt catgggeece ceatgeatac gtacatteet
                                                                      780
ggacaccete accacceaac agtgatgatg catggaggac egececacee tggaatgeca
                                                                      840
atgtcagcat caagccccac agttcttaat acaggagacc caacaatgag tggacaagtc
                                                                      900
atggacatte atgeteagta gettaaggga atatgeattg tetgeaatgg tgaetgattt
                                                                      960
caatcatggt tttttctgca atgactgtgg agttccattc ttggcatcta ctctggacca
                                                                     1020
aggagcatcc ctaattcttc atagggacct tta
                                                                     1053
```

```
<210> 5215
<211> 2210
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2211)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2212)...(1523)
<223> similar to gi407419 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5215
ttttttttt ttctttaaag aaaacaagtt ttatttttat catcagaaca ttctaataaa
                                                                       60
                                                                      120
aatattatga tgagattage tacetttatt etetgageet tgaetetgte acaggeetge
                                                                      180
cctgggngcg cctgcacgct cagctccctg aggtaggtcc ggaggggggg agacccccc
                                                                      240
getgeeceee geecetnggg cagggatace etttacettt aatggteece teetteeaga
cccccaacag cccttgggat gccccattag cagccctgcc acgggttggg aagaaactgg
                                                                      300
                                                                      360
cctccaccct ccaccaaccc ccaagacagg caaggaaacc gtctcagggc tgggcacaac
agcaggtggt gcgggggtag agggaagagg cgcacccttc tgcactcaac cgctccagcg
                                                                      420
ggcagagctg agggccactg cccccccag gctggcacca ccatggtcta gaccccaagt
                                                                      480
                                                                      540
ggcctgaatg ctgtggatca cttccttctc cccttccaca gtgttttgggg agttggggag
                                                                      600
gaagggaagg gagaggagtg tcaacgtcgc agtgacgggg tcctgagaca actcactctg
                                                                      660
ccacccggc aggcggcagc agacagtggc ccgcacgggc ctgaggggcc tcctgtctgt
                                                                      720
ggtgcccatc ccaccgagag gatcctggcc cgcgagccgg cagacacttt attatacaga
                                                                      780
aacactatcg tegteteeac gggeggaace aacaaaagea agteteteea agteaaaaat
                                                                      840
aggttttgga ttcttggtgg cggcagtatc cgctgaaaaa atagactgaa cttctgaaat
                                                                      900
tatcttagta gcaaaacaat tacaagaaaa aagttgcaac ttcagtgcta tgactggaaa
ggggcctttg gccggcggcc cctgttaccg gcggcccctg tgcgcctggg agctcctccg
                                                                      960
                                                                     1020
ggcttgagga agccgcccac gtgccctgat ggagaaaatg ggactccaac aggaggccgt
gteeteacae eteagaetge geteacaget egggaggate aagttacaat aaacagteea
                                                                     1080
ttaacttett gettteaggt tteeetggag teaggeatet etgeacagte cagggeagee
                                                                     1140
aggggetgea gagggtetgt gacacceege caegatgeag cagtggggae acaageetga
                                                                     1200
gggaacctgg agtgtggaga ggcaggagaa ggtgcaagga gaggctgcca tggtgtgcaa
                                                                     1260
ggaacctggg attgcgtctt taaatagttc tcagtcattc ttaaagtcct ccctcaagac
                                                                     1320
acaatgggac ctagattaaa gagaageegt eteteegetg teecagggeg caggeggaat
                                                                     1380
geeegagegg tetteggagg caegggtget ggtggcacet caetgaaget cageeggget
                                                                     1440
gtcgccagcc catcatggcc tggcagctct gtctgctgtg aaggtgacaa tgccacagtc
                                                                     1500
cteggggeag gaacgeeeet eactgeatee tgteaggetg eagetgegge geetggtaet
                                                                     1560
                                                                     1620
gcacgaaagt ggtgcccgcg ggtgctgcgg ctgagagggc ctggggcacg gcggcagggt
agetgtagee caegaagetg geageegtgg caggegagge ggegtatggg taetggteat
                                                                     1680
aggtggccgg tgggtactgg gcgtaggccg ggctggccgg cgtgtactca atgtagggcg
                                                                     1740
                                                                     1800
aggacagega egggacaggg geggetggga teaccaeget gggetgeaeg atggetggtg
ggtagatgta gtgcggggtc agcccgtaag tccgctggat caaggtgggg tgcagctgct
                                                                     1860
gcaccccaat ggcaaagccc gtctggaggc tccgcggctt ggcgcccaga tatgccaggt
                                                                     1920
                                                                     1980
teaegttgge ettgeggeeg tegatgatgg ggttegggte tttgeaagee eteteagetg
                                                                     2040
eegeeeggte ggeeatggte aegaageegt ageegeggga ettgeeegte tggeggtegg
                                                                     2100
tgatgaccac ggcctcctcg atgtcgccga agccctcgaa gtacttcctg agcgaggcgt
cggtagtgtg gtacggcagg ccgcccacga agatettggt gaacgtggtg cccttctgcg
                                                                     2160
agccgtacat gacgccgggg gcggccaggg gccgcgagaa acccgcgctc
                                                                     2210
```

```
<210> 5216

<211> 1909

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1910)

<223> n = a,t,c or g
```

```
<220>
<221> misc_feature
<222> (1909)...(1473)
<223> similar to gil668766 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5216
agttcctaaa ttgggggaaa catagtgaat tccacataat gttttaaatt attcagccac
                                                                       60
taaaaataaa tttacatatg atttcattaa tatattcact atctaaacca tattttttac
                                                                      120
actacgtaaa atacattgta tatgtacagt gagtgatgct ttttgcttta gttctcattt
                                                                      180
ttcacattaa ggggaggaaa gctacccata gatagtattc ttactccttt tcacatgctt
                                                                      240
caaggacagt ttgcaagtgg atataaatac atacacatca ctagtgatta tgcttttatg
                                                                      300
ttatttccaa cttcttatag gtaacataat tttcagacaa tgttagctgg ttttaaaccc
                                                                      360
                                                                      420
aatcagtaaa ctggcattaa aggattctta ataaaccaaa cactgaaggc ctctttcata
                                                                      480
tttgtatcat ctgcattttt ttttatatgc ttgtcatgtg gctttacttt cagcctcact
                                                                      540
cttttcttct tccaaatgga ttatccttaa accttttacc tttaaagagc ctgagattta
                                                                      600
tatttaactc gaacaacagt ttgcctctgt tgcccctgtg ttcatgtttt cctaagccag
                                                                      660
agtttcccac gcctcctgtt cctggcagcc caagtgcctt cgctgggcta ctcccacctg
geocttgett tteatteett agggeagtea ettageacet tecaaagtge etgeacatgt
                                                                      720
                                                                      780
ttcttatttc atttcttaaa cattcatatt accactattt agattgaagg aacagaattg
                                                                      840
gtttgggctt gaagagaata caaagagatc tgtcttcaat tatctgatag tagtaaagtt
                                                                      900
tcacgggaga aagaaagatt tcggttccac ataaggaaaa acttggaaag ttttgaatgg
                                                                      960
aaagttcata gagagattca gtaaccacct gtcaggaatt ttgtaaagac gtctacggcc
atateaceet gaacgegeet gateteatet gateteggaa getaageagg gtegggeetg
                                                                     1020
gttagtactt ggatgggaga aattttataa agaacacatg aacactagct ggcctatgtg
                                                                     1080
gcetttaaaa tetetteeaa teetgagatt eecacaacte tggataaaaa ggggcaaaag
                                                                     1140
tattagacat ttcactccca ttaatatgag ggaagtaaat gacattgagg tccaatttgt
                                                                     1200
ctgtagttca gaattagtcc aatacagacc cttagaccaa ctagggaaca aaaagcaagc
                                                                     1260
atttcaagtt acctataagc ctgggctcat cagaatatag aaacagccat gtgctagctg
                                                                     1320
aaagccattc aatgaggctt tctattaatt tcctttaaaa gcaatggtta ttattgaaac
                                                                     1380
tcctaaatgc taaaatctga aggacccatc cttatatata agttctgatc atactgaaac
agtcatttag caacattgct ctgatgtcca ggaccctggt ctgtaatgaa agcaatgaag
                                                                     1500
ggaggggctg gcagggcact actggggtgg tataggggac actgcttata ttcacaaggc
                                                                     1560
cacgtggtcc aagcatagcg gagagcaacc acagtgccat gacaagaatc gatcgccagg
                                                                     1620
gtcagggact gggtggagac ggtgttcata gaagctggaa gccacttgca tcgatggtca
                                                                     1680
ctgcaacagg agateteaaa tatettgttg teetttttet geacetggat ttgetggtaa
                                                                     1740
tatgtqaqat tqaqcaqccc cttqtqaqcc aagagttcta tcttctcagg cagtggtcct
                                                                     1800
tcaaaggtca aattettete accataagee agageaeggg ceeccaaatg cageegataa-
                                                                     1860
gccacagict gtttatctcg gcccggtaat tccaacccgg ntgacgtca
                                                                     1909
```

```
<210> 5217
<211> 1462
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1463)...(1171)

<223> similar to gi1872200 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5217
                                                                       60
tqaqqqcccc, tqtcaagqcc cccaccctcc tttttctgtg tttagtgagg gtgtctgatg
                                                                      120
cataactgag cctcagttgg gaggggctga ggggatcggg aacacttcca aggggaagca
                                                                      180
gctggggtga gagccccaag gtggagagaa cttggcaagg ttgaagagga atggtgggca
                                                                      240
ggggagggag aagagtaaaa gaagaggcag ttagggctgc ccgggtcagt ctgggaactt
                                                                      300
tggcttcctc ttcaggtcac taggagccat cagagggtta agccagcaga gacagcttcc
                                                                      360
tgtttttaag acgttggtct ggctgctgtg ccgggagcaa gagagaaaga gacttggggg
                                                                      420
agttcagaag aggtgacggt ggtggaggaa agtggatgga tatggggtct ctttcagagg
tagaacagtg gggtctcttt cagaggtaga acagtgggac cttctgacca ctggcaggta
                                                                      480
gagggtaagg gagaggggaa ttgggttgcc tgctagtttt tgctttaact aactgggtag
                                                                      540
atgctgatgt cattcactga ggaggaagag ggcaggttga gggtaggtag aaattcacag
                                                                      600
                                                                      660
ttttggtttg gttgtagttt gggatccctg tggacaagaa aagtttccat gggtatatta
                                                                      720
tgaatgcctt ctgaatcaag ggtttaaatc acatcctctg atttattctc cccaaagacc
                                                                      780
actagatgcc gctgtttaca cgggagcaat tatgcagtac aagactcctt tcctgaggag
agggcacgga tgccggagag ggtactgatg ccggagaagg cactgatgcc tgacagggga
                                                                      840
                                                                      900
acceacagag aggggageee etgeetttga gggggttaet etttaetggg agacateace
                                                                      960
cttcagtgtg gtcttcagac acatgtgata gcagtgtgac ttcatatggg atagaaagct
                                                                     1020
agggactagg tagtgtttga gctgggtctt cagggttgca aggcatttca ggtgggggca
ggacgeteca ageagaagga acageeggge aacagagege atetecetge ttatggggta
                                                                     1080
                                                                     1140
gatggtacag tgaagaggtt attggcatag ggggttggac ttttcagtgt ttctcaacaa
                                                                     1200
aggcacagtt agccttttaa agaaggacgg tttttggctg ggtacggtgg ctcatgcctg
taatcccagc actttgggag gccgaagagg gcagatcagc tgaggtcagg agttcgagac
                                                                     1260
                                                                     1320
cagcetgace aacatggaga aaccetgtet etactaaaaa tacaaaatta eeeggeeatg
gtggcacatg cctgtaatcc cagctactcg ggaggctgag gcaggagact cgcttagacc
                                                                     1380
caggaggcgg aggttgtggt gcgctgagat cacaccattg cattccagcc tgggcaacaa
                                                                     1440
                                                                     1462
gagcaaaact ctgtctcaaa aa
```

```
<210> 5218
<211> 1689
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1690)...(667)
<223> similar to gi4336692 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5218

ttttttttt aggcagaagg agtcagagag gttgccttta atagctcagt tactattgtt 60
tatgttgata aagggtctgt taatgtattg ccaaaagaga accaggaaaa gaggtccagt 120
tttgggaagc acttgcctta cttgtacccc gctcactctc aactgaggct cctgtgatga 180
gcacagtggg cacacacccc atccccaacc tgtccacggg tccctgggcc atggtggggt 240
tgggagtgac actgctatga ggggaacgtg gagagctggt ggctcactca tggtgagag 300
ctcaagggcg gcagtggct tgcagcaaag ttggcagctg gagcagcgtg tggggcccgg 360
gaaggaactg ggaaggagca gacagggtg ggctgggga actgccaagg atcccgagcc 420
```

```
aagccactgc gaaactgaga agggtgcttg ccacatggga gccacttcgt ttggctaagc
                                                                      480
attgggtctg ggttcaggag ccacgatgct gccccgggta ccccccttgc caccgtggca
                                                                      540
ggtgtggcac agacacaggc ctctgccaac agggcagctg ggcacgctgg gcactcaggt
                                                                      600
                                                                      660
tgccttctcc ttcccgcttt ccattggttc ctccttcagg ttctcggtca cgagcttcat
ttgctgctgc ttgagtgcct ccaaagactc aaattccagt ctggctagtt tcatctggat
                                                                      720
atgccgtggc ttatcaggta tggcaaatgc aagtataaac tttaaagcca ggagtgcgtg
                                                                      780
ctccactgct actacaatca aaatgaggtc tgcttttgat tctggaaaga ctgcattcac
                                                                      840
ttgtggtgac attccaatca gcgcacagtt agtgaccaca gatataacac tcatcatttc
                                                                      900
aaaagccaac tgccacacac caatattggc tgaaggttct gagaatggac gtttgaagac
                                                                      960.
cctgcacatt tttaaggcat ctgaatttac ttcagtgaag ttatttaaca cagcaaaggc
                                                                     1020
agctgctaat gggtaaacac aggagaaaag gctcacataa ccaaactgca ggaataactc
                                                                     1080
caagtaatca tcaaaggtgc ccaaataagt tcccatttct ttttccagga tgacttgttc
                                                                     1140
atataatgta gcatcaatgt ctgcctttaa agcctgcacc ttcctcttca cctgcacacc
                                                                     1200
atgetteett tggageeaat aaggaagaaa agatteeata atttggttga ggatetggga
                                                                     1260
ggtaattagg agagtggcca agctctggcg caaaagcttc atatctttca agacaaaggc
                                                                     1320
aatatagaag agtgaggcaa agcaattgag gaagttgaac actaaaactt tcagaattag
                                                                     1380
atggttetga taggeagatt ceaatetgtg atteteecat gaagttaaaa aeteggeage
                                                                     1440
atategatag agaegattea tgateteaat cacaatggea tagatgatge tgggeacata
                                                                     1500
caacaggaca ctggtccact cagacccgct gttctcatgt agacccaagg cccaaacctc
                                                                     1560
catgtcgaag taaatcatca tgacatacag tgagaaatag aggcagaggc acacgaatgg
                                                                     1620
cagggagace aggtaaatge geaactgtet ettgtagetg gggtacagag geteeteett
                                                                     1680
                                                                     1689
cccagtgat
```

```
<210> 5219
<211> 458
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (44)...(142)
<223> similar to gi4235143 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5219
gagaatccca gcaagaatca cattactttt ttctaataaa acaggtctta ctgtttctaa
                                                                       60
gccagaactg attagccgtc tggagcaaag acaggagccc tggaatgtga agagacatga
                                                                      120
gaccatagcc aaacccccag gtaggttgga tgaatgaaac acatgccaca ggtgaaagct
                                                                      180
ccaaaggcca agaaggaaga cagacttcaa gagttatttg agaagctctg ctccaatgga
                                                                      240
gatgattttt gaggaacgtg attgtttatt cttgctcttg tacagaggca tcttctgtct
                                                                      300
aatgctccta aattctctaa aaagtaacct tactttgagg ttatagtgag agccaaagtc
                                                                      360
ctcttcatgg cttataagag actttattat ctgactqccc tttcattqtc ttqqqqcaca
                                                                      420
cagaaatata tgtgtatttt tgaggaactc tatgttaa
                                                                      458
```

```
<210> 5220
<211> 689
```

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(436)
<223> similar to gi4406663 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5220 60 gggctatacc ccaggtgaat caattcagat atttgctgag attgagaact gctcttcccg aatggtggtg ccaaaggcag ccatttacca aacacaggcc ttctatgcca aagggaaaat 120 gaaggaagta aaacagettg tggetaaett gegtggggaa teettateat etggaaagae 180 agagacgtgg aatggcaagt tgctgaaaat tccaccagtt tctccctcta tcctcgactg 240 taqtataatc cqcqtqqaat attcactaat qqtatatqtq qatattcctq qaqctatqqa 300 tttatttett aatttgeeac ttgteategg taccatteet etacateeat ttggtageag 360 aacctcaagt gtaagcagtc agtgtagcat gaatatgaac tggctcagtt tatcacttcc 420 tgaaagacct gaaggtaatt tgataataca cgtctaagct taatctctta ctactattat 480 caagaaaatt attttgcctc tgatatttta tgaccctaga tgaacataat cttttcctaa 540 600. agaaagtaga tgtgccccta atattcagtt ttgattatat gtcttcatag tttcgatcac caaacaataa ttattttacc ttgacgttgc tttttaatac ctactattct gtgtattttg 660 acatgcataa gaacatgctg ttcgaattg 689

```
<210> 5221
<211> 2948
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2908)...(2246)
<223> similar to gi5457690 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5221 tttttttttt ttgtgaaaat tttatttttc tttttattgc aaatttctgg taaaggaaag 60 aacatggaag ctgattetea tttgagettt ggtgagaaga gaactgcact gtggetegae 120 ageteaceae eteggetgea cacceaaaea egeggaggee tegggeaege aetgatgeet 180 gcgacccacc tcccagaggt tctgacttaa tcggtctggg aggcacagcg gggcatcagt 240 agatttccca actcctctgg atgatttcaa catgtagcca aggtgagcac acctgcggtg 300 geteatetea aggggetgge aatgteagaa geacetgaga ageteagetg acageeaagt 360 gtcacctgct tacatcactc cttggccaga gtccagctgg tgttccccgc ctccctcttc 420 ccaggtgtcg atgttctgat tccttctcct caaagacccc acaagacaga gatgctggag 480 ggggtgtggc ttcctgtgct gtggtttgtg cttaaacgtg gagaaccaca tgaaccacgt 540 gtacgctacc acaaaagaaa ttcactttct gattgcaaaa cagcattcgc ctctttttat 600 ttgttaagtg gaaacttgtg gcaaaataag aaaacatgtg ttggataata tagtccctat 660 ataacctctc atgtccaaat ttgaaaaaaa aaattgtcaa gccattgaca gcaaaatatg 720

```
tactttagca gcatatttta tatgggtaaa cagtaatagc cagttagaca cttcatttgt
                                                                      780
gatttgtcct aaaaatagaa aatgcttttt attttcctga gtccttggca aacaaaaaac
                                                                      840
attititict tittaatigt taaagticct gittitictit ticcigggac acceteacag
                                                                      900
ttcagaacgt tgtgtctcac tgtcagtttt tacatacaga gatgaacaaa cagcactggg
                                                                      960
gccaattttc aatgactgat caaatatggc gattgaaaat aaaacaccca tcatctacaa
                                                                     1020
agttgctcaa gatgaaagtt tcttacagtg ctataaatgc aatatcaatt tgaattgttg
                                                                     1080
tccatacaaa agtatgaatt tctattccat tagtaatact gaatgattaa taccttaaca
                                                                     1140
gcgataaaat ttttagaaca tttaaaaaaat acagaggatt ccagttttac atcatacttc
                                                                     1200
tgacggatta tcatactttc tattttgtct gcaaaacttt tacagagtac agtgcattga
                                                                     1260
catgataaaa ccaaggcaca aaaatacagt tacgataagt gtatataaac cctagcactt
                                                                     1320
tgtgccaatt ttggaaacag atcataaagt ctgaaaaatt accacattct atttgattag
                                                                     1380
tgaacaatta attgtgcagt aaatagactg ttaaccacca ttccattatt aaatatatgg
                                                                     1440
ctatcactat acaggitgig gataaticaa aaatagitti aaatattaaa accigtaata
                                                                     1500
tctaggtggt caacgcagat attgagcctt acgttatcta aataagtttc catttaattt
                                                                     1560
gcaatccaca tggcagttag caatttttaa actatttcca ttacataaat ggtggggttt
                                                                     1620
attotaaatg ttaaatoott toocottaca aaagacagaa gatttacaag aagataacca
                                                                     1680
atataagaag tgcatagaca acgataataa aatccaaatt ggactcaaag gttgaagtct
                                                                     1740
aatctactgg gacattetet taatttaggg tgaggagcaa cacatteetg tgatgattea
                                                                     1800
ttagtttett aattaaaaaa aaateeeeat gacattttte aaaatagtaa acagtettea
                                                                     1860
ttagtgcatc aagcattgaa gaaaaattgt cgtctttcca ttcgtaaaat gaagaagata
                                                                     1920
aaagcettte aaaateeagg gegggggatt teeattgaat ttagagaagt gaaataaact
                                                                     1980
ggtaaaaact gtatttcata ettttaacaa aagagtattt teaagaetea aggtaaacat
                                                                     2040
ttagacccat aaaaacacat ttcttggcac atgcacgcca tggatggaac aatcctgaat
                                                                     2100
gcagegatgg cetggetaca gaggtateeg geteetagee ceaetggeaa aactgtettt
                                                                     2160
taggacettg teccagetee etteacatgg gggtetetgg ettetgeate agetggattt
                                                                     2220
gettetgtag etggteeetg teeagettea tettggeete gagaaettge etgagggate
                                                                     2280
ctatgettte atagaegget gtaaacceag cattaactte tgettteatt teettgatgt
                                                                     2340
totggttcat otgtaactco agettggtga ttogcocqtq catcttotco tottottqco
                                                                     2400
ttgttetetg accateaaaa gtettetttt gaccetette tattttgtea ageetggetg
                                                                     2460
acatetgget gagettette tecatatece ttteaetgge tecaetgttt teettaacaa
                                                                     2520
tcaaggaaag cigatcaatt ttctgtaaaa gctctttttc tatccgttct tgttcctgtt
                                                                     2580
gcaaccaact ccgtgcagat aatatctggt tactgagttc ctcaactgta cctttaaatt
                                                                     2640
tagtgtccaa aagctgaagc tggtggttac tgtctctgtg agacatcttc agtttggtgc
                                                                     2700
totgototga tattgacaag tocactotgt toaaaagotg agaaatotgt coototgoat
                                                                     2760
ctttgatttt cgtttccaag ataagtttgg cagcctgctg ttctttgttc aagtgctgga
                                                                     2820
geceeteata ggtegttttg tgetetgeag aaagactage tatgetggea teacatetgt
                                                                     2880
ccagacaaag aacaaagett gccactette etegaagate teccacaceg gagagetgge
                                                                     2940
gcatctcc
                                                                     2948
```

```
<210> 5222
<211> 1414
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1231)...(306)
<223> similar to gi3873707 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5222
                                                                       60
ccataggcag ggtaggcatg cagcagggag ccggaatcca atccctcgcc attaatttaa
                                                                      120
cttagatgag ctactcctgg tccctggagc cactccccag gaaggatcct gtgaagacac
atotggotot ogtgoccatg otootgocac titgoccaac caacgaagtt agcaaatagt
                                                                      180
aaagtgttca tcattaccta gttttgtatt ataaaatgga atcaggaaca taaataggaa
                                                                      240
caaqtaqcaa aaccccagcc ctgcgtagga ccattatcct ctcagccacc tctgcgtagg
                                                                      300
ccaatgagtt tggaaagttt ctcacagttt tcaagtttca gcgactctgc tttctgtttc
                                                                      360
aatcgttcat ctctgtataa tcctgccaaa tttgtcagct ctgacttttg ttgtttctcc
                                                                      420
ttccaacaac tagtctggat ataatcaatg taatccttct ctattgtttt ctccaagtca
                                                                      480
tgcagagaag ctcctctgta ggccttgtca aagtttttat ccacaaagta aggcacctgc
                                                                      540
aggttetgag tttetetaga aatggtgtag cecaaggteg atttatagaa cagactatat
                                                                      600
gggggattag tagccagcag ctgagtaatg acagatataa tcacaatcac aagaactgga
                                                                      660
agtagetgaa taaatgeaga atatgtagte tgaggtttet ettetteete eteettetga
                                                                      720
                                                                      780
gtctgtgtcc tctcatgtcg gtgccgtcga cggtaatagt aagtgtcatc tgtcacattt
gaaaacatat gaatatttcc tgtaqqaaaa tgtcctccaa agaagacgtt gaacagctct
                                                                      840
totggagtga tgtcagcttc aaaatccctg taataattat aaggtctggc tcgaggggca
                                                                      900
gtgaaagtca cctgttcatc tccgtattca tcatagcgaa gtctcttatc aggattgctc
                                                                      960
aggactgcaa atgcatttcc tattgctttg aaagcatctg ttgctccagg agcacagttc
                                                                     1020
ttgtcagggt gaaatttcag ggcgagtttt ctgtaagctt tcttaagctc ttcgtcacta
                                                                     1080
gcatctcgag aaactcccag aatttcatag taatttctgc atttcttgat cctttgtacc
                                                                     1140
ccaagcaget gtteeteact gtaegtggag tteeceteac cetgeegggt etgagteeac
                                                                     1200
teatteteag aettetttte ettttgtgee tteatgeagt tacageagee acaggggtea
                                                                     1260
tgactetcag gaggtgtgte ttetgggtat ttgtttette taaetgegte aatgtaaget
                                                                     1320
teegtecage geteceeget geccagagte geegecatat eggtteecaa teageaggte
                                                                     1380
egeogageet ecceegegee egeocaegeg teeg
                                                                     1414
```

```
<210> 5223
<211> 206
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (23)...(151)
<223> similar to gi190482 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5223
cagtttgtta aagggggatt ttggccccc ccccaaaac cccaaaagtt tttttggggg 60
tttaaaaagg gggcccccc cgggccaagg ggggccaccc cggggtttcc cccctttgg 120
gggtttaaaa agggggccc cccatgggtt taagggtttc cacacccggt ccacggggtg 180
gtataccccc tttttaaaa aaaaaa 206
```

```
<210> 5224
<211> 429
<212> DNA
```

```
<213> Homo sapiens
     <221> misc feature
     <222> (2)...(200)
      <223> similar to gi5019774 in the genepept database release 114,
        Run with FASTXY 3.3t00, default parameters
      <400> 5224
                                                                        60
gagagaccag gtggactgga gtagactgtt gagagacgct ggtctggtga agatgtccag
gaaaccacga gcctccagcc cattgtccaa caaccaccca ccaacaccaa agaggcgagg
                                                                       120
aagtggaagg ttcccaagac aacccggaag ggaaaaggga cccatcaagg aagttccagg
                                                                       180
aacaaaaggc tctccctaaa agaccgccgc ttcaaaaaaa cctgaggaat ggagtgggcc
                                                                       240
aacactatcc agccactctg accagccgaa cgaggaactc aatcaaaatg agccatagcg
                                                                       300
ggaccacaag ggcaaggaga ccaccactt ctccagtctc tcttcggaca gccagtaatt
                                                                       360
cccgggcaag gccagagact tcaagtctat ctgaaaagtc tccagaggtc taaccccaga
                                                                       420
 taaatagcc
                                                                       429
     <210> 5225
     <211> 2318
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(2319)
     <223> n = a,t,c or g^{\circ}
     <220>
     <221> misc feature
     <222> (4)...(1002)
     <223> similar to gi3929219 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5225
ccatctagec catcaagect ttetgetgee ageagtettg acaacttate tgggagtttt
                                                                        60
tcagaactgt cttcagtagt tagttcaagt ggaacagagg gtgcttccag tttggagaaa
                                                                       120
aaggaggtte caggagtaga ttttagcata acteaatteg taaggaatet tggaettgag
                                                                       180
cacctaatgg atatatttga gagagaacag atcactttgg atgtattagt tgagatgggg
                                                                       240
cacaaggagc tgaaggagat tggaatcaat gcttatggac ataggcacaa actaattaaa
                                                                       300
ggagtcgaga gacttatctc cggacaacaa ggtcttaacc catatttaac tttgaacacc
                                                                       360
tetggtagtg gaacaattet tatagatetg teteetgatg ataaagagtt teagtetgtg
                                                                       420
gaggaagaga tgcaaagtac agttcgagag cacagagatg gaggtcatgc aggtggaatc
                                                                       480
ttcaacagat acaatattct caagattcag aaggtttgta acaagaaact atgggaaaga
                                                                       540
tacacteace ggagaaaaga agtttetgaa gaaaaccaca accatgecaa tgaacgaatg
                                                                       600
ctatttcatg ggtctccttt tgtgaatgca attatccaca aaggctttga tgaaaggcat
```

gcgtacatag gtggtatgtt tggagctggc atttattttg ctgaaaactc ttccaaaagc

660

720

```
aatcaatatg tatatggaat tggaggaggt actgggtgtc cagttcacaa agacagatct
                                                                      780 .
tgttacattt gccacaggca gctgctcttt tgccgggtaa ccttgggaaa gtctttcctg
                                                                      840
cagttcagtg caatgaaaat ggcacattct cctccaggtc atcactcagt cactggtagg
                                                                      900
                                                                      960
cccaqtqtaa atggcctagc attagctgaa tatgttattt acagaggaga acaggcttat
                                                                     1020
cctgagtatt taattactta ccagattatg aggcctgaag gtatggtcga tggataaata
gttattttaa gaaactaatt ccactgaacc taaaatcatc aaagcagcca gtggccctct
                                                                     1080
acgttttact cctttgctga aaaaaaatca tcttgcccca caggcctgtg gccaaaagga
                                                                     1140
                                                                     1200
taaaaatgtg aaacgaagtt taaacattct gaccttgata aagcctttaa ataatgtacc
agtgttttcc taaatatttc cctgtttttt ccagcacttt aacagatgcc cattccccgg
                                                                     1260
ttaaactggg gttgtctgta cctaaattat aaacagagtt aacttggaac cttttatatg
                                                                     1320
                                                                     1380
ttatgcattg attcctaaca aactgtaatg ccctcaacag aactaatttt actaatacaa
tactgtgttc tttaaaacac agcatttaca ctgaatacaa tttcatttgt aaaactgtaa
                                                                     1440
ataagagett ttgtactage ceagtattta tttacattge tttgtaatat aaatetgttt
                                                                     1500
tagaactgca gcggtttaca aaattttttc atatgtattg ttcatctata cttcatctta
                                                                     1560
categteatg attgagtgat etttacattt gattecagag getatgttea gttgttagtt
                                                                     1620
gggaaagatt gagttatcag atttaatttg ccgatgggag cctttatctg tcattagaaa
                                                                     1680
tettteteat ttaagaactt atgaatatge tgaagattta atttgtgata cetttgtatg
                                                                     1740
tatgagacac attccaaaga getetaacta tgataggtee tgattactaa agaagettet
                                                                     1800
ttactggcct caatttctag ctttcatgtt ggaaaatttt ctgcagtcct tctgtgaaaa
                                                                     1860
ttagagcaaa gtgctcctgt tttttagaga aactaaatct tgctgttgaa caattattgt
                                                                     1920
gttcttttca tggaacataa gtaggatgtt acatttccag ggtgggaagg gtaatcctaa
                                                                     1980
atcatttccc aatctattct aattacctta aatctaaagg ggaaaaaaaa aatcacaaac
                                                                     2040
aggactgggt agttttttat cctaagtata ttttttcctg ttctttttac ttggttttat
                                                                     2100
tgctgtattt atagccaatc tatacatcat gggtaaactt aacccaggaa ctataaaatg
                                                                     2160
taggttgtct cagtcccctc cagggcntcc ggatggggca agtgcagttg aaacagggtg
                                                                     2220
ettettgete eeggggttte tetneetgga tgttatggee cattgggaat tngeegteag
                                                                     2280-
tttgtgcacc attgggggac cngggcngtg ctcagttt
                                                                     2318
```

```
<210> 5226
<211> 1464
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (332)...(677)
<223> similar to gi6010482 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5226
aaccetette tgttecaage actgtgtgag accetgeett ggataagtea aatgeatgag
                                                                       60
cttaggaaag tagagtaact gctacaaata ataaaaaaca gatacatctg cagtcaagac
                                                                      120
agtcaccacc gaagagtacc tggtgaaccc tgtgggcatg aaccgctaca gcgtggacac
                                                                      180
ctccgcctcc acctttaacc acaggggctc cttgcacccc tcctcctcgc tgtactgcaa
                                                                      240
gaggcagaac totggagaca gocacettgg gggtggtoot getgecaceg etggtggtoo
                                                                      300
cegeactage eccatgtett etggtggeee eteggeacet gggetgagge etecageete
                                                                      360
cagccccaag agaaacacga cctctcttga aggaaacaga tgtgcctcaa gcccttctca
                                                                      420
ggatgcgcag gatgccaggc ggccacggag caggaacccc tccgcctgga ctgtggagga
                                                                      480
                                                                      540
cgtggtgtgg tttgtgaagg acgccgaccc acaggctctg gggcctcacg tggagctctt
cagaaagcac gagattgatg gcaacgctct gctgttgctg aagagtgaca tggtcatgaa
                                                                      600
```

```
gtacctgggc ctgaagctgg gacccgcact gaaactctgc taccacattg acaaactgaa
                                                                      660
                                                                      720
gcaagccaag ttctgacgtt tttaaaaaaga cagaagcgaa acccaaaaca acagatccca
                                                                      780
agattatett etgeettace aatateeege caacateaca aaatagaete teetettaaa
                                                                      840
attaacagec acagagaegt ggtettttta taaaaettgt gaatetttge ettttgaaga
                                                                      900
atttaacatg gaccttttcg agaggctcct ctgtgttcat aatttgccaa aaaattacaa
                                                                      960
aaqcctgtga tttttaacat ccctgttatg ctgatttctc ttaaagtggg tcctatttgc
                                                                     1020
ataacgagag agtggggaac tgaatgctta tgcccaagga gagttctgga gggttcaaag
gatgaaagaa ggacctttgt ccctgcggtc tctgcaggga caccccctc aacaccatct
                                                                     1080
                                                                     1140
geetetaact etgaeetggg gaeetateee tgtgageett gtttgeetea getetggaag
                                                                     1200
etgacttetg aagatgactg ceteacettg cactgtetgg aaaacttgaa ttattttaeg
ccgtgaaaga aaaaggaaaa aaaaaaaaat cttttctgtt cctaaaaaaat ctgaagaact
                                                                     1260
                                                                     1320
gggtttctcc gctagagggc aaactgctaa tgaaatttca ggaccctcac tgactgcagt
agcaggattg ttcagtactg agtggatggg ttagggtgtc tgtgaacaaa atctacccca
                                                                     1380
                                                                     1440
cacagaaaca ggggatttat tccacagtta gcaccacaga ttgcgacttg ggaagaaacc
atcagctàga ggggtctagt tcgt
                                                                     1464
```

```
<210> 5227
<211> 1306
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1164)...(722)
<223> similar to gi4468812 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5227 ttttttttt ttccaatgcc aaaaactggt gatttataga aattcaccct ggtttatttt 60 tttcaaccaa aggaaaaaaa aaacatggtt caataattca gcatttggga ctctggcaag 120 tactgtctgc attgttcaaa ataagtgttc ctggctgtga cgctctgcaa ccacatactg 180 ategegeeca ggaacettet tecatggtte taataaaaca aaggacecae acatggageg 240 ttacgtgagt caacaaaaga tgctctatca caatggtgcg taaaaagcaa gtctttgaaa 300 aatatccaga tototaaago gaatacaaac actootattt gggttttgtt tttgttcato 360 ttcagtattt atattttagt tgttgaggaa aattttttt actgtaagga aggagttata 420 tggactttat aaagtgggaa ccaacaggct gccggctaat acatacgctt tccctccaag 480 tcaagtagct ttttcccccc gaaagcctct ttcatgattt tcattatggt tcagaaaagt 540 aaagaaaatg atttcaagta ttcaattcct ataaaaattg gtatcaaaag taatagagga 600 cctaatttct ttataattcc atgttttaaa aaataactta agaagcaaga ggtccggccc 660 tttacttgta taaatacagc agcagaacta gagtttctta agacaacgtg gagaagagtc 720 tgtgtttagc acctcaatca tcgatcttaa cgttggaaac gtttctgaaa ctgatggaag 780 agtettataa gaaggtgaaa taetttteaa gtteateeag ettttggega etttgetaaa 840 ggcctctgaa ccaggggctg tcatagcttc aaagtcgact aacttccctt tgggaatttt 900 tectgetact tettttecae ttgecateag tgeteceaeg atgacegagt aageaattae 960 actggatcct cgagagagtg gcattaaatt ataaaagtaa taaactaagg ataagattaa 1020 gttgcagaca gcatcagcct ccccaaattc tgatgaaaga atcaatactt ttccttttgc 1080 tgtcaaatct ttataaagtg catctatttc agcatgatat aattgtgtcc tttcttccgt 1140 ggtttgagtt tccacagaaa ataatatatt gccaactttg tctcctgtaa tcgtgattgt 1200 gaatccatca tattccttcc cttggtcttt aaggctggga acttttgtgt tcacggtgaa 1260 cccatccttc gttttagtat taaactgctt cataatcgga agaagg 1306

```
<210> 5228
<211> 4260
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2458)
<223> similar to gi4240241 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5228 gccggcttca atcacgggtt caactgcgca gaatctacca acttcgccác cctgcggtgg 60 attgactacg gcaaagtggc cactcagtgc acgtgccgga aggacatggt caagatctcc 120 atggacgtgt tegtgegeat eetgeageee gagegetaeg agetgtggaa geagggeaag 180 gacctcacgg tgctggacca cacgcggccc acggcgctca ccagccccga gctgagctcc 240 300 tggagtgcgt cccgggcctc gctgaaggcc aagctcctcc gcaggtctca ccggaaacgg agecageeca agaageegaa geeegaagae eecaagttee etggggaggg taeggetggg 360 gcagcgctcc tagaggaggc tgggggcagc gtgaaggagg aggctgggcc ggaggttgac 420 ecegaggagg aggaggagga geegeageea etgeeaeaeg geegggagge egagggegea 480 gaagaggacg ggaggggcaa gctgcggcca accaaggcca agagcgagcg gaagaagaag 540 agetteggee tgetgeeece acagetgeeg ecceegeetg etcaetteec etcagaggag 600 gegetgtgge tgecatecce actggagece eeggtgetgg geecaggeee tgeagecatg 660 gaggagagec ecetgeegge accepttaat gtegtgeece etgaggtgee eagtgaggag 720 ctagaggcca agcctcggcc catcatcccc atgctgtacg tggtgccgcg gccgggcaag 780 gcagcettea accaggagea egtgteetge cagcaggeet ttgageactt tgeecagaag 840 ggtccgacct ggaaggaacc agtttccccc atggagctga cggggccaga ggacggtgca 900 gccagcagtg gggcaggtcg catggagacc aaagcccggg ccggagaggg gcaggcaccg 960 tecacatttt ecaaattgaa gatggagate aagaagagee ggegeeatee eetgggeegg 1020 eegeceacce ggteeecact gteggtggtg aageaggagg ceteaagtga egaggaggea 1080 teceetttet eeggggagga agatgtgagt gaeeeggaeg eettgaggee getgetgtet 1140 ctgcagtgga agaacagggc ggccagcttc caggccgaga ggaagttcaa cgcagcggct 1200 gegegeaegg agecetaetg egecatetge aegetettet acceetaetg eeaggeeeta 1260 cagactgaga aggaggcacc catagcetec eteggagagg getgeeegge cacattacce 1320 tecaaaagee gteagaagae eegacegete ateeetgaga tgtgetteae etetggeggt 1380 gagaacacgg agccgctgcc tgccaactcc tacatcggcg acgacgggac cagcccctg 1440 ategeetgeg geaagtgetg cetgeaggte catgeeagtt getatggeat eegteeegag 1500 etggteaatg aaggetggae gtgtteeegg tgegeggeee aegeetggae tgeggagtge 1560 tgcctgtgca acctgcgagg aggtgcgctg cagatgacca ccgataggag gtggatccac 1620 gtgatetgtg ceategeagt eccegaggeg egetteetga aegtgattga gegeeaeeet 1680 gtggacatca gcgccatccc cgagcagcgg tggaagctga aatgcgtgta ctgccggaag 1740 cggatgaaga aggtgtcagg tgcctgtatc cagtgctcct acgagcactg ctccacgtcc 1800 ttccacgtga cetgegeeca egeegeagge gtgeteatgg ageeggaega etggeeetat 1860 gtggteteca teacetgeet caageacaag teggggggte aegetgteca aeteetgagg 1920 gccgtgtccc taggccaggt ggtcatcacc aagaaccgca acgggctgta ctaccgctgt 1980 egegteateg gtgeegeete geagaeetge taegaagtga aettegaega tggeteetae 2040 agcgacaacc tgtaccctga gagcatcacg agtagggact gtgtccagct gggacccct 2100 tccgaggggg agctggtgga gctccggtgg actgacggca acctctacaa ggccaagttc 2160

2220

atctecteeg teaccageea catetaceag gtggagtttg aggaegggte ceagetgaeg

```
2280
gtgaagegtg gggacatett caccetggag gaggagetge ceaagagggt cegetetegg
ctgtcactga gcacggggc accgcaggag cccgccttct cgggggagga ggccaaggcc
                                                                 2340
                                                                 2400
gccaagegee egegtgtggg cacceegett gccaeggagg acteegggeg gagccaggae
                                                                 2460
tacgtggcct tcgtggagag cctcctgcag gtgcagggcc ggcccggagc ccccttctag
                                                                 2520
gacagetgge egeteaggeg acceteagee eggeggggag gecatggeat geceegggeg
                                                                 2580
ttegettget gtgaatteet gteetegtgt eeeegaeeee egagagggee aceteeaage
egegggtgee cectagggeg acaggageee agegggaege egeaegegge eecagaetea
                                                                 2640
gggagcaggg ccaggcgggc tcgggggccg gccaggggag caccccactc aactactcag
                                                                 2700
aattttaaac catgtaagct ctcttcttct cgaaaaggtg ctactgcaat gccctactga
                                                                 2760
                                                                 2820
gcaacetttg agattgtcac ttctgtacat aaaccacett tgtgaggete tttctataaa
                                                                 2880
tacatattgt ttaaaaaaaa gcaagaaaaa aaggaaaaca aaggaaaata tccccaaagt
2940
gaaccaggat tototgagag gtcagagcat ctcgctgttt ttttgttgtt gttttaaaat
                                                                 3000
attatgattt ggctacagac caggcaggga aagagacccg gtaattggag ggtgagcctc
                                                                 3060
gggggggagg ggcaggacgc cocggtttcg gcacagcccg gtcactcacg gcctcgctct
                                                                 3120
cgcctcaccc cggctcctgg gctttgatgg tctggtgcca gtgcctgtgc ccactctgtg
                                                                 3180
cctgctggga ggaggcccag gctctctggt ggccgcccct gtgcacctgg ccaggggaag
                                                                 3240
cccgggggtc tggggcctcc ctccgtctgc gcccaccttt gcagaataaa ctctctcctg
                                                                 3300
gggtttgtct atctttgttt ctctcacctg agagaaacgc aggtgttcca gaggcttcct
                                                                 3360
tgcagacaaa gcacccctgc acctcctatg gctcaggatg agggaggccc ccaggccctt
                                                                 3420
ctggttggta gtgagtgtgg acagetteec agetettegg gtacaaceet gageaggteg
                                                                 3480
ggggacacag ggccgaggca ggccttcggg gcccctttcg cctgcttccg ggcagggacg
                                                                 3540
aggeotggtg teetegetee acceaeceae getgetgtea eetgagggga atetgettet
                                                                 3600
taggagtggg ttgagctgat agagaaaaaa cggccttcag cccaggctgg gaagcgcctt
                                                                 3660
ctccaggtgc ctctccctca ccagctctgc acccctctgg ggagccttcc ccaccttagc
                                                                 3720
tgtctcctgc cccagggagg gatggaggag ataatttgct tatattaaaa acaaaaaatg
                                                                 3780
gctgaggcag gagtttggga ccagcctggg ctatatagca agaccccatc actacaaatt
                                                                 3840
ttttacaaat tagctaggtg tggtggtgcg cacctgtggt cccagctact cgggaggctg
                                                                 3900
tggtgggagg attgcttgag tccaggaggt tgaggctgca gtcagctcag attgcaccac
                                                                 3960
4020
tttattttaa aaagggggc tcaaacgccc ccgggcttgg ggggccctgg ggaaccccag
                                                                 4080
agggggtccc ccaggaccaa cccttttttt ttttttgggg ggggggggg gggcctgccg
                                                                 4140
tacaaggagc tggccaggat aaggcaggag gatcacataa aataaggggg tcgaggttta
                                                                 4200
agegagaaac caatgeeegg agggeeetee aaacettggt ttacteaagt ggeeaceteg
                                                                 4260
```

```
<210> 5229
<211> 1211
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3) ... (1085)
<223> similar to gi402647 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5229
aggaatgggt ccctgccaac accgagcccg tggagcgctg tggcttcacc gtcaagaatc 60
tcccgaccgg agccagaatc ctcttccgag tagttgggt caacatcgcg gggcgcagcg 120
agccggccac cctggcccag ccggtcacca tcagggagat tgcggagcca cccaagatcc 180
```

```
ggetteeceg ceateteege cagacetaca teegeaaagt gggegageag eteaacettg
                                                                      240
                                                                      300
tegteceett ecagggaaag ecceggeece aggtggtgtg gaccaaggge ggggeecege
tggacacete cegegtgeae gtgeggacea gegaettega cacegtgtte ttegtgegee
                                                                      360
aggeggeeeg eteegaetee ggggagtaeg agetgagegt geagategag aacatgaagg
                                                                      420
acaccgccac catccgcatc cgcgttgtgg aaaaggctgg gccccccata aacgtgatgg
                                                                      480
tgaaggaggt gtggggcacg aacgcgctgg tggagtggca ggcccccaaa gatgatggga
                                                                      540
acagtgagat catggggtat ttcgtccaga aagcagacaa aaaaaccatg gagtggttca
                                                                      600
acgtctatga acgtaacagg cacactagct gtactgtgtc cgaccttatc gtgggcaatg
                                                                      660
aatactattt ccgagtttac accgagaaca tctgtgggct cagtgactca cctggtgtct
                                                                      720
ccaagaacac ggcccgcatc ctcaagacag gaatcacctt caaaccgttc gagtataagg
                                                                      780
agcatgaett ceggatgget eccaagttee tgacaectet catagaeege gtggtegtgg
                                                                      840
etgggtacte ggeageete aactgtgetg teagaggeea eeegaageeg aaggtggtet
                                                                      900
ggatgaagaa caagatggaa atccgtgaag atcccaagtt cctgataacc aattaccaag
                                                                      960
gagteetgae getgaacate egtegeeeet egeeettega egetgggaet tacaeetgee
                                                                     1020
gggccgtcaa cgagctgggc gaggcgctgg ctgagtgcaa gctggaggtc cgagtgccgc
                                                                     1080
agtgagacet gteeectace tgeeaagaca attggtggtg gagteetgae eecaateeee
                                                                     1140
aacctcccag gactgtgttc tttctggagt tttcgctgag aacaaaacag tgttgtctgg
                                                                     1200
aaaaaaaaa a
                                                                     1211
```

```
<210> 5230
<211> 2018
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(527)
<223> similar to gi1842216 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5230
gaacgctcaa gtcgaccatc cgtatcaagc acagcgggaa tgacttcaag tgtcctcatt
                                                                       60
gegeetteet gggtgaeage aaageeaeee teeggaagea eageegegtg caeeagtegg
                                                                      120
agcategtga gaagtgeteg gaatgeaget acteetgete eageaaggee geettgegea
                                                                      180
tecaegageg tatecaetge acegteegee ettteaagtg caactaetge agettegaet
                                                                      240
ccaaacagcc cagcaacctg agcaagcaca tgaagaagtt ccacggggac atggttaaga
                                                                      300
ctgaggetet agagaggaag gacaeeggea ggeagageag eeggeaggtg geeaagetgg
                                                                      360
atgccaagaa gagtttccac tgcgatatat gcgatgcctc cttcatgcgg gaggactcgc
                                                                      420
tecgeageea caagagacag cacagtgagt acaatgagag taagaacteg gacgtgaceg
                                                                      480
ttctccagtt tcagatcgac cccagcaagc agcccgccac gcccctcact gtgggacacc
                                                                      540
tecaggtgee cetecageee agecaagtge eccagtteag egagggaaga gteaaaatea
                                                                      600
tegttgggca teaggtgeec caggegaaca ceategteea ggetgeegee getgeagtga
                                                                      660
acatogtoco gootgoottg gtggoocaga accoagagga actocoaggg aacagooggo
                                                                      720
tgcagatect gegecaggte agtetgateg ecceettea gteetegegg tgteegageg
                                                                      780
aggegggege aatgaeeeag eeggetgtee tgetgaeeae eeaegageag aeggaeggag
                                                                      840
ccactctgca ccagactctc atccccacgg cctcaggtgg cccccaggaa ggctctggca
                                                                      900
atcaaacttt cattaccagt tegggtatta ettgeactga etttgaagge etaaaegeet
                                                                      960
tgattcagga ggggacagca gaagtgacag tggtgagcga tggaggccag aacatcgcag
                                                                     1020
tggccaccac agcgccaccg gtcttctcct cctcttccca gcaagaacta cccaagcaga
                                                                     1080
cctactccat cattcaaggg gcagcccatc cagctttgct ctgtcccgcc gactccattc
                                                                     1140
```

```
cagattagtg cttaaaaaaa caaaaggagt gggggaaagg aattgagaaa aagaaatctt
                                                                1200
1260
acggagtete getetgttte ccaggetgga gtgcagtgge getatettgg etcactgcaa
                                                                1320
                                                                1380
egtecgeete ecaggiteaa gegattetéa tgeeteagee etecgágiag etgggaceae
aggtgtacga catcatgact ggctaatttt tgtatattta gtagagacgg ggtttcatca
                                                                1440
                                                                1500
tgttgaactc ctgacctcaa gtgatctgcc cacctcagcc tcccaaagtg ctgggattac
aggtgtgage caccatgcet ggccgtggtt tgctcttaat gtttttaagg atggttgtga
                                                                1560
atccccctgg ccccataata aattgtaatt ttatactgct tactataatt tttttaacac'
                                                                1620
tgtaacaact ttgagaccac ctctgaatcg tcgcattata actgttgtag aatcttaaat
                                                                1680
gttaccaaga tgattccaat gaggggttgg aattaaatgc attaagtagt gaattcatgt
                                                                1740
gtttgtttcc aacttgattt tccaactcta ataaaggttt ctgtccatct tattacattt
                                                                1800
gtgtagtaaa tggtacttcc cagcctctct tttgccccat tctggaatac tccccagagt
                                                                1860
ttgggggtgt tcatgtttta tacatgtaag tctgttggca tgaaggacca ttttctacat
                                                                1920
aatatgacat ggatacttga cccaaaaaaa aatgtttagt gctaatgagc agaaaatgaa
                                                                1980
tggttccata ataaattgat atctgattaa aaaaaaaa
                                                                2018
```

```
<210> 5231
<211> 2159
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)...(1177)
<223> similar to gi163538 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5231
aaccacgcgt ccgctcacct ccaagattct cttccgggat ttggtccttg ccgtgcgcga
                                                                       60
ccatgeette aeggggteee ettaceetgt categgatee etggagaace aetgeggget
                                                                      120
ggagcagcag gctgccatgg cccgccacct ctgcaccatc ctgggggaca tgctggtgac
                                                                      180
acaggegetg gaeteeccaa ateeegagga getgeeatee eeagageage tgaagggeeg
                                                                      240
ggtcctggtg aagggaaaga agctgcccgc tgctcggagc gaggatggcc gggctctgtc
                                                                      300
ggatcgggag gaggaggagg aggatgacga ggaggaagaa gaggaggtgg aggctgcagc
                                                                      360
gcagaggcgg ctggccaagc agatctcccc ggagctgtcg gccctggctg tgtactgcca
                                                                      420
egecaceege etgeggacee tgeaceetge ecceaaegee ecaeaaecet gecaggteag
                                                                      480
ctccctcagc gagcgcaaag ccaagaaact cattcgggag gcagggaaca gctttgtcag
                                                                      540
gcacaatgcc cgccagctga cccgcgtgta cccgctgggg ctgcggatga actcagccaa
                                                                      600
ctacagtccc caggagatgt ggaactcggg ctgtcagctg gtggccttga acttccagac
                                                                      660
gccaggctac gagatggacc tcaatgccgg gcgcttccta gtcaatgggc agtgtggcta
                                                                      720
cgtcctaaaa cctgcctgcc tgcggcaacc tgactcgacc tttgaccccg agtacccagg
                                                                      780
accteccaga accaetetea geatecaggt getgaetgea cageagetge ceaagetgaa
                                                                      840
tgccgagaag ccacactcca ttgtggaccc cctggtgcgc attgâgatcc atggggtgcc
                                                                      900
egeagactgt geeeggeagg agactgacta egtgeteaac aatggettea acceeegetg
                                                                      960
ggggcagacc ctgcagttcc agctgcgggc tccggagctg gcactggtcc ggtttgtggt
                                                                     1020
ggaagattat gacgccacct cccccaatga ctttgtgggc cagtttacac tgcctcttag
                                                                     1080
cagcctaaag caagggtacc gccacataca cctgctttcc aaggacgggg cctcactgtc
                                                                     1140
accagecacg etetteatee aaateegeat ceagegetee tgagggeeca ceteactege
                                                                     1200
cttggggttc tgcgagtgcc agtccacatc ccctgcagag ccctctcctc ctctggagtc
                                                                     1260
aggtggtggg agtaccagcc ccccagccca cccacttggc ccactcagcc cattcaccag
                                                                     1320
```

```
qcqctqqtct cacctgggtg ctgagggctg cctgggcccc tcctgaagaa cagaaaggtg
                                                                     1380
ttcatgtgac ttcagtgagc tccaaccctg gggccctgag atggccccag ctcctcttgt
                                                                     1440
cctcagccca cccctcattg tgacttatga ggagcaagcc tgttgctgcc aggagacttg
                                                                     1500
                                                                     1560
gggagcagga cacttgtggg ccctcagttc ccctctgtcc tcccgtgggc catcccagcc
teetteece agaggagege agteacteea ettggeeceg acceegaget tageceetaa
                                                                     1620
gecetectit acceeaggee tiectggaet ceteceteca geteeggaac etgagetece
                                                                     1680
cttcccttct caaagcaaga agggagcgct gaggcatgaa gccctgggga aactggcagt
                                                                     1740
aggttttggt ttttattttt tgagacaggg tctcgctcca tcgcccaggc tggagtgcaa
                                                                     1800
tgttgcaatc atggctcact gcagetttga acteccagge tcaagegate eteccatete
                                                                     1860
                                                                     1920
agéeteetga gtagetggga etacaggeae aggeeaecaa acetggetaa tgtttaaatt
ttatgtaaag atggcggggg gggcgggggt ctccctatgt tgcccaggct ggtctcgagc
                                                                     1980
tectgacete aagtgateet eetgeeecag cattecaaag tgetgggatt acaggtgtga
                                                                     2040
gccactgcct ggcctggccg taggtttgta actgtttcat agaagagccc tggagaagac
                                                                     2100
agtagaatga gcctatctag tttaaaaaat aaagaagcac gttgatttca aaaaaaaa
                                                                     2159
```

```
<210> 5232
<211> 1148
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (478)...(594)
<223> similar to gi4102711 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5232
agtcatgcga tgaccatgat tacgtctagc ctggccgcag gcctagcacg cacctattgc
                                                                       60
tgacaccctg agtttaattt tgttacccgc cgtgcggcac acgtgggata aaagctgaag
                                                                      120
gaggactgta acaacactga caacaaagaa cggaagtcct tccagaagga gcttgggatg
                                                                      180
gccctactga agatggactg ccagggcctg gtggtcagac tcatccagga ctttgtgctc
                                                                      240
ctgaccacgg ctgtagaggt ggcccagcgc tggcgggagc tggctgagaa gctggccaag
                                                                      300
gtotocaago agcagatgga ogcotacgag totococaco gggacaggaa oggggttgtg
                                                                      360
gacagegagg ccatgtggaa gcctgcgtat gacttcttac tcacctggag ccatcagatc
                                                                      420
ggggacaget accgggatgt catecaggag etgcacetgg geetggacaa gatgaaaaac
                                                                      480
cccatcacca agegetggaa gcacctcact gggactctga tettggtgaa etecetggae
                                                                      540
gttctgagag cagccgcctt cagccctgcg gaccaggacg acttcgtgat ttgaatgggt
                                                                      600
cocctccct cotgetgete tggagtgcaa geoctettet geoctgegtg coetgetgte
                                                                      660
accgcggagc tgaagaggga ggaaggggcg gctgctcaga cagatttagg gcccgccagc
                                                                      720
taggetacae ceateatgeg eegeceteet eeategaggg agaggeetga agggaetgee
                                                                      780
tactgcagct cgttgccaat cacatagctt tctatttgtt aagtataaat ttaaatttaa
                                                                      840
aatcactttt ttaacgaatg gggggaaggg atctatgaga aaggtggtat ctaatttttt
                                                                      900
tatggaccat aaaggtttaa aagaaaatag gggcacaggg tgttgaggtt tttatgttgt
                                                                      960
tatagacctt tttaaattat gttagagatg tatataggta tttaaaggtc actgggagca
                                                                     1020
tttctgattc ccgggccaca cttttgcatt tcaacactca agcccggqaa aaqatqctcq
                                                                     1080
ttcggatgtt gtacctcttt cactccctgc gagtagcact gtgaatgacg tattaaaaag
                                                                     1140
tggctttt
                                                                     1148
```

```
<210> 5233
<211> 3675
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3676)...(2035)
<223> similar to gi4101480 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5233 ccatcatgga gcacctgcgg gaattcctgt taacaggccg tgaggacctt cagcctgtgc 60 agatccagag cctggagaca ctgggggtgc tggcacgagc agtgggggag cccatgaggc 120 egetggetga ggaatgetge cagetgggte tgggeetetg egaceaggta gaegaegetg 180 acttgcggcg ctgcacgtac agcctatttg cagccttatc gggtctgatg ggtgagggcc 240 tggcgcccca cttggaacag atcaccacgc tcatgctgct gtcactgcgt tccaccgagg 300 gcattgtgcc tcagtatgac gggagcagct ccttccttct gtttgacgat gagagtgatg 360 gggaagaaga ggaggagctc atggatgagg atgtggaaga agaggatgac tcagagatct 420 cagggtacag cgtggagaat gccttcttcg atgagaagga agacacctgt gctgccgtgg 480 gggagatete tgtgaacace agtgtggeet teetteeata catggaaagt gtetttgaag 540 aagtatttaa actgctggag tgccctcacc tgaatgtgcg gaaggcagcc catgaggctc 600 tgggtcagtt ttgctgtgca ctgcacaagg cctgtcaaag ctgcccctcg gaacccaaca 660 ctgctgcttt gcaggctgcc ctggcccgag tcgtgccatc ctacatgcag gcagtgaaca 720 780 gggageggga aegecaggtg gtgatggeeg tgetggagge cetgaeaggg gtgeteegea getgtgggac cetcacactg aageceeetg ggegeetege tgagetetgt ggegtgetea 840 aggetgtget geagaggaag acageetgte aggataetga egaggaggag gaagaggaag 900 atgatgatca ggctgaatac gacgccatgt tgctggagca cgctggagag gccatccctg 960 ccctggcagc cgcggctggg ggagactcct ttgccccatt ctttgccggt ttcctgccat 1020 tattggtgtg caagacaaaa cagggctgca cagtggcaga gaagtccttt gcagtgggga 1080 cettggeaga gactatteag ggeetgggtg etgeeteage eeagtttgtg teteggetge 1140 tecetgtget gttgageace geceaagagg cagaceeega ggtgegaage aatgeeatet 1200 tegggatggg egtgetggea gageatgggg gecaceetge ceaggaacae tteeecaage 1260 tgctggggct cctttttccc ctcctggcgc gggagcgaca tgatcgtgtc cgtgacaaca 1320 tetgtgggge aettgeeege etgttgatgg ceagteeeae eaggaaaeea gageeeeagg 1380 tgctggctgc cctactgcat gccctgccac tgaaggagga cttggaggag tgggtcacca 1440 ttgggcgcct cttcagcttc ctgtaccaga gcagccctga ccaggttata gatgtggctc 1500 ccgagcttct gcgtatctgc agcctcattc tggctgacaa caagatccca ccagacacca 1560 aggccgcact gttgctgctc ctgacgttcc tggccaaaca gcacaccgac agctttcaag 1620 cagctctggg ctcactgcct gttgacaagg ctcaggagct ccaagctgta ctgggcctct 1680 cctagactgc aggctgcagc cagtccagag agaatagagc ctgcccaggc cttaaqacca 1740 cototoagec cagttoagtt otgoottaco aaagattotg agactoatac coattiggag 1800 ccagccccac ttgctgcctt acagggctgt ccctgaggct ggatctgtta caaatgagtc 1860 atgacatcat actgtaataa aagcagettg ttttetgett gaacaatage tetgagagea 1920 agaaggetgg aaatgeacat teagaaatga ggtaageagg acceagtgag geaegaegtg 1980 gtttactaga agtggccggt ttcctggcag ctttgtaaat ggactctaac ctcagtggaa 2040 tetgggeece ggetggatea ggaggegace atatggettt tettgtttea egtgaagaat 2100 ctgttgcgct gagagcacca ggagcaggta gaagacccgg gcagccatcc tgcgggggct 2160 gagaggtgac accaggctgc tgaagtcggg ctccctgtta gcctgcagct ccagtgccac 2220 tgccctgtgc actgcttcca gtgagagcag ctcgagctct gggggcagca ccaaaggcat 2280 ctccatgggc acctcaggga gttcaggcac cacgggcaat gcaggagctt ctggcgcctc 2340 cacctcagge caggeccace gttettetgg tgggatgagg etgatgeggg actteteete 2400

```
2460
ttcagctgcc tctagggaga tctctaaaga caccataagg ggaacactgg gctccagggc
                                                                     2520
ctccctcggg acctcaatct cacttggaac ttcaatcttt ctcctttcct cctcageggc
tgeeteetea ggeagetete geetgaggge tittggggggt ggetgggeae aatgggteea
                                                                     2580
gagacccagt agttcagggg gtagccagcc agagagagtt ggggttctga acaactccgc
                                                                     2640
agggeetetg atggteetet egggeggetg caccatggga catteccage agtgggetet
                                                                     2700
ggtttgcagt tgttcctgga atttctccgg ggagatctga gtctccttgt cccagaacag
                                                                     2760
taaccggcga cgacggcggc ggcgaggagg tggggggact ggggggcctcc tctctgggct
                                                                     2820
gggtggggct ggcagacgca gctcctccgg gggggtcacc tccatgagta gggccccagg
                                                                     2880
ttcccagcct gtcagcctca gctcctcagg acccagtgcc tctcctattc cttccacctc
                                                                     2940
tgcaggaget ggaggtggga geegegggat ttetaacaag atagettett etteetetge
                                                                     3000
gatcagcagg tecagttete ggeggetgae etetgggage tecegtteae eeteaatete
                                                                     3060
cagcatecgt atgggetetg cetecaggat egtgatggee teaggtggea geacagtgae
                                                                     3120
eggaateete tetggeteec tgggetetgt aggaacttea ggagggatet etteaactet
                                                                     3180
ctctgggatt gcagcctcta agaggtgtcg aatctgaggg atatcgaaag gactaggaag
                                                                     3240
tetgggatee acagacatea teecaaaaaa gggatetgga geatetteta gggtetecat
                                                                     3300
catggccagg tggttaggaa gcagcaggct gggtagctca gtctccatat ctattcggat
                                                                     3360
etgeagetgg geaeggtgga ggegeteeaa gatgtgetgg atgteeteea egaggtaetg
                                                                     3420
gcattgttga gaatagacgc ggatcacacc gatctgaagt tgggctgaga gatagaggga
                                                                     3480
gaagegggge egeggeagge egggetgegg gggttgeaet egtaceagea egtaattgag
                                                                     3540
gatttcctcg caggttttca ccacattcac cctcaggtat tcgcgcttca ccaaccggct
                                                                     3600 -
geogegagte geogecagee agatggtgge aaagcageeg gtgtggeget gaagcacgtt
                                                                     3660
gggatagtag aacat
                                                                     3675
```

```
<210> 5234
<211> 1747
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(416)
<223> similar to gi2739105 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5234
gegacegeca actggaegge gggetteage egtgggecea egeegeeege gettgtggge
                                                                       60
atcoggocog catggooggg cogoggogog cgccgcctcc togtgotgga agaattcaag
                                                                      120
acggagaaga ggctgtgcga gatgttctac gccgtcacgc tgctcttcct gctcctctgg
                                                                      180
gggccctacg tcgtggccag ctacctgcgg gtcctggtgc ggcccggcgc cgtcccccag
                                                                      240
gcctacctga cggcctccgt gtggctgacc ttcgcgcagg ccggcatcaa ccccgtcgtg
                                                                      300
tgcttcctct tcaacaggga gctgagggac tgcttcaggg cccagttccc ctgctgccag
                                                                      360
agcccccgga ccacccaggc gacccatccc tgcgacctga aaggcattgg tttatgaggg
                                                                      420
aggeceegee acatagaeee ecaaceeage ettteeettt ggeteggaeg gtgaegttgt
                                                                      480
atcttttcct tctggcccct gtttaatttt ctaagctgcc ttcaaaatga ctcgaagtgg
                                                                      540
acagacactt ggattgtact gactcctttg gggggggggt gggtgaggag taagatgctc
                                                                      600
ageceaetee ageteegeae attegteete etaaetegae tttetteetg acaataggee
                                                                      660
ctgcagtctt tttgtagcgg tactgacgtc ttttattcca tgtgtggttc cttttttct
                                                                      720 .
ttttctataa aggctgtact aattttcttc atgcaacgtt tcctaaagac catggccagt
                                                                      780
tttctacaga agctattttt tgacaacctc aagtgggcat tacattttgc agtgaagtag
                                                                      840
agggaaccta gggggacttc ttcacaagtt agatttcttg aggatcttct gttggaagca
                                                                      900
```

```
ggagaaagtg gggggtgggg gaagttgtcc gaaatgccct ctgaattgcc ggctgcaggg
                                                                      960
tecttgtget gegetggtte tttgaaagte teagtgttga tattgaaett aaagageaga
                                                                     1020
gatggagatc agtagcaagg cagtcatttt tttaaagcag taagtaacaa gtaagatttg
                                                                     1080
gttcccggtt tactttctgc tgctaaaaac cacgtcagtg acaactgctc tctgtattat
                                                                     1140
agcaatcttg aatggaaaca tttctgtcaa gttgtaagtt ttaaaagagt aaagtgtttt
                                                                     1200
ggttagtaat gatgtggaga aaaatacagt attgcatgtg ttcgtgtgta tagattgtgg
                                                                     1260
ttcgaggatt gggagggctc tgagaagcag agtactacat caaaattgtt ttaagtattt
                                                                     1320
tttgccaata aaaaattaat tttatggaaa tggcttgtgc tttgagaagc ccagttttat
                                                                     1380
tetgtettat gaaactaatt teeactttga aaattgttet tetgttgttt atggtataaa
                                                                     1440
tgaatggaat ataatgatat ceteetteta ggaaacaaag cattteetta aaatgtttge
                                                                     1500
taggttaage tgtgetgtte tactgatggt tgttttaaat taataatgag aactataatt
                                                                     1560
taaataatat ttetttgtta gacattataa tgttaaactg aaagactaaa ttetgcaagt
                                                                     1620
actatataat atttttggct tataatgcta catttttatt aatgtacctt ccgttttgag
                                                                     1680
gatttatatc tgtatttctc tttgcattat acaaatatac cagtattttc attctggaaa
                                                                     1740
                                                                     1747
```

```
<210> 5235
<211> 856
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(201)
<223> similar to gi913894 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5235
agtgtataac agacaaacca tecaggteag tttaatgeag aatggetaec cagtgatete
                                                                       60
ggcctttgca ggagaccagg atgtcaccag agaagctgct agcaatggcg tgctgctgct
                                                                      120
catggaaagg gaagacaaag tgcatctcaa acttgagaga ggcaacctca tggggggctg
                                                                      180
gaaatactcc acattctcgg gcttcttggt gtttcctcta taaacacaga gccccctaga
                                                                      240
tggtggggga atggcaaact ggacccagga ctccgccctt taaaacaccc tgaacttact
                                                                      300
ggaattggac accttgtttc caacctccgt cagactgttg cagtagaaga atgatttcct
                                                                      360
ttgaaacctc cagtactttt gtttttgttt tttggaatac tgacaattcc tcgggaacct
                                                                      420
ggcctctaat tagttttaga tgacaaggtc ttaaggagaa atgaaattat cgatttgagc
                                                                      480
aatttgtacc tgtgattgta aagtcaatat cggattttat tgttgggacc atggacctct
                                                                      540
tttgtttgta tgttgtattg tcgtcccaac ggaaggagag ctcctgactc caggatgggc
                                                                      600
tgcaggttgc agtcagggct tgaagtagga gcccagcaaa gaaccacctg ctggacagtc
                                                                      660
ctttgacatg tgttctgtgt gtgtctgtat agccttaaga aaaagaatgg cttcactttc
                                                                      720
attetgtatt etteeecca ceatgtgget gggaggaett gggaggggga tggggaeatt
                                                                      780
ggggaacctg ttcaagaagt gctttattcc agaggaagca aatttttgca cgattgggac
                                                                      840
tgcaattttt gttttg
                                                                      856
```

```
<210> 5236 <211> 4451
```

<212> DNA
<213> Homo sapiens

<220>
<221> misc\_feature
<222> (4452)...(148)
<223> similar to gi4589474 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 5236

tttttttttt ttgcgtttcc tcttcgtaag agaagcctga ggcagccagg gagagggtcc 60 ccaggecect ggcagggaga gggtggcace etectecegg geceteceag gaggggcage 120 tggcagtggg gcgcagtgcc gggggctcag acataatact ccttgtcttt gttcttcttg 180 geettgetgg gegtettggg ggeageeggg geettetett teaecacege eecattgete 240 tgggccgagt tactgatgta gtttcggctc tggtccacct ggtaggagcc ctcatcacga 300 ttgcggtact tatacatggc gtagaggagg atgaggatgc agagcgccgc cgccgccaca 360 atgeceacea ceatgecegt ggtgetgetg gaeteeegga teaceteeae tgegeeegge 420 gggccccgct ccccaggccc tgtggggttg gctgtgggca gatgggggaa gccgggggct 480 540 gaggtcacgc cggggcgcag gggaggggc ctccgcggct caaaggacgt gggggccccg ggccccaagg gcgggttctc cagcaagggc tgaagcgggt ctcggtggtt catttttccc 600 geeggeaggt tgggggeegg ggeggagggg geaaacagca ceecagggge geeegtggee 660 ceatetgtee tgaggttggg ceggggageg ggtttgeggg gtgacaggag ggtggtgegg 720 teegtgacca ggggaaaggt ggtgtaaaag teetegtegt eegtggggg gaggetggag 780 teaaagacet eeceggagge gaageeegag geetegatgg geteetegea gtegetgteg 840 tecegetegg cetggeaegg geceeeagag ggegggegge gegeggeggg egggggeage 900 gtgtcttggg tggcgccac tcccgtgagg aaggggtaga aggtaggggg cgggggcacg 960 aagggggatc gggtggccac gggagggggg tctaaggagt cctccgtgat aatgggcaat 1020 attaactete etecagtaet gggeteacae teeteeaggt ceteateate gettggacae 1080 teageagagg ceaceageag gteatetgtg ttetgggtgg tgetgteeët eagtgtgggg 1140 gageggeece ggegegtggt ggtagtggee atggtggtgg tagteteeat gatggtggtg 1200 gccatgtcag ccagcagggt ggtggccgtg gtctccgcac tgagcagcac ggacggcccc 1260 teccecacca ggegeaggtg acceteagte egeacattgg ggtegetete ggeggeeage 1320 gccagcacct tgagcccatt gtagtagagg ccggacacct ggccctggaa ggggcggccc 1380 tgatcccggc'ccccgatctt gatggcagcc tggctgttga agatggtcag ctggcggcct 1440 ttgtcgagca gccactcatc tactactcga ccaagccggt aggggattct ctgtctagca 1500 ategecagge getegttate aaagttteet geegggtace getegttgae eggecagetg 1560 tecacetgea gggtggcgtt geegeegett egagtgaage geaceaegtg gtatttgeeg 1620 tegettaeta tggegttggg etegtegatg gtaatgtegt eegtgeeeac gttaaagate 1680 acccccacgg tgccctggtc gatgtgcagc tgcaggtagt ctccaaggcc ggaggcgctg 1740 tecaceegea ceageacage geteegetgg tgggtgetga ageecaegge caggegatee 1800 atcctcgtgc tgggcctgtc attggggggc cacgtgtagg tgatgagcgc tcccccttc 1860 ccaaagatgt atgtggtccc gggatcattg cagacagggc ctccatagga agtcatggtg 1920 cagtegeagg tgaagecate ceaetgetge aageagaege cetggttgge acaggaetet 1980 tcagtgcagg tggtgctggg gccatcacag cccctctcca cctgcccaat gcggtgcagg 2040 gcgtcggcga tgaggtctgg gagacgtccg ttgaggtcca ctgaggccag gcagcctga 2100 aagccatccc gggaggccac cagcttgggc aggttgctga acatattctt gctcagaccg 2160 ccaatgtaca actoccottt gagatogagg tttogggege cattggagtg ctgegtgaca 2220 gtgcgggagt caatettgag cgtgtgcacg ttgcctgggt ccctggacac caccacgttg 2280 tgccactggt tgtcattgac tggtttgtct gagttcccct tcatcaagga cgggccattc 2340 cccaggtcaa acacgtagtg gatgtacccc ttgaccagct cgatgacaat gaagtcattg 2400 ccgttgcccg agttgaacag aagaagccca tcaggggccg tggtcttgaa ctggaagaag 2460 aggtgcatgg aagcataggc ttggagcgtg gcgagtgcca ggtagctgct gcgactcttg 2520 aaggtgacgg gatcggccac aatggcacgc aggccaaagc gagcattgag ctcacagtag 2580 gtgatgtcac catcettgca etggtecatg tagggetgge cattgaacae gageecaete 2640

```
agatgcccga tgaagttgga gggcaccacg gagataaacc gccgctccgt catgatgccc
                                                                     2700
                                                                     2760
gtotcaatgt tgtggaacte cageegeata tgggeteetg ceatetgtee etecacagte
                                                                     2820
acgttgtcca cagacagetg caggetettg ccacgeegga ccacceteae egtgtgeeae
                                                                     2880
tcattgtcat tgagcttgtg ccccgcaaac agcgtttcgg ggcctttact gggtgcgcag
ccgacgcgca ggcagtcgag gttgacagtg agcttcatct gccccccatc cagctccagg
                                                                     2940
cgtagggtgt cggcagactc cctggaagtg gtggccatca tgagtccgta ggcccgctgg
                                                                     3000
                                                                     3060
gacatgaaac gcagggacac atcetetgee teegtgtgea tggegttagg cagcatgate
ttcatgtaca tggagccatc gtagctcagg accgtggcct ctctctcaca gacccgccca
                                                                     3120
aqaaagccgg tcccgatgca gtcacagatg aagcggttcc agccttctcg acagacgccc
                                                                     3180
ccattgcgac agggggcaga tgcacactgc ttcagcgtct cccgggagca aaagggggca
                                                                    3240
acgeceaeag ecceetgage etcagecagg ecceggaggt eteggetaeg eccatetatg
                                                                     3300
                                                                     3360
aagaggteee geacacagee caegtageet geeeggagtg etgetgteea caectetggg
                                                                     3420
ggcaggggca ggtccacccg gccccctta gggagaccgc ccaggtacag ctcactctcc
aggtccagaa tctcgctgtc tccagtggcc aagaacggcg tgctgcgact attcactgag
                                                                     3480
atggageett ttegeecate eetetggaag tecaegtgae accaetegee ateattgaee
                                                                     3540
                                                                     3600
ttgcggctgg atgcccgcag cttgatgccc ccagatccca tgtccagcag aagatagagg
                                                                     3660
tggccgtcca atagetecat ggcaaagtag teggeceget gagcagaget gtggetgeca
                                                                     3720
getecacece cagecogecg geoetggetg aagageagea geceattggg eteggtggtg
cggaagteta gggagatgga gccagtgcgc ttagcgctcc agcggggcag cgccacaaag
                                                                     3780
                                                                     3840
gcctcgggac tctcaaaggt cacagggtcc agggcagcca catcctcaca gcggaatgac
aagtccccct gcagcttcat cttggggtcc ccttcctttg ccaggcggga tagttccaat
                                                                     3900
                                                                     3960
ttgaagtcat tgttcttata gaccacgtcc ttgaggcagc ccatgaagtt gttgctgacg
                                                                     4020
ggegageeeg geaggteage tgtgttgggg etgeeeeeaa tgtagaagaa gteateagag
                                                                     4080
cccagcatgg tgtaatcctc ctgcgtgtag cctgtggtgg tcaggatccc gtccaccgag
                                                                     4140
atggtcacca tagcgtgtcc aatccctgcg tgctggcgca ggtttcgggt gacccggacg
                                                                     4200
tegtgecagg egttgtegtt gaacttgeea ttgaegggtt ccacaaggge etegaaggea
cctgagccta ggttgatgac cagccagaca gccccagact tgagggacag gttgacgtag
                                                                     4260
                                                                     4320
teggeegact tgeetgtatg eageateagg cegttgegtt geagggtgeg gaaggeeagt
                                                                     4380
gtgateteat eagtgetget etggatgggg ttgtgtgaca ggtegtagea gaagaactea
                                                                     4440
ttgcctttga aggtcgccac aaactcctcc ttgccttttg ttggctggtg cacatcgccg
getectecte t
                                                                     4451
```

```
<210> 5237
<211> 1230
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1198)...(295)
<223> similar to gil041396 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5237
ttttttttt ttgggatttc aaaagtttat ctcaatctcc tcattcccag acttccaggt 60
gggaggcagg ccgggcagta atgtgagcat ctcaaggaca ccacagtcac tgcgaccaag 120
ccagtctgtg tcctcattta cacaatgaag gcgatggacc acatagtctc tgacgtccca 180
ctgcaccctg acagctgaca aatctgtttg tcctcaaaga caggtctgag agggaggaaa 240
actgatgggg atgatgagtt agagctccgg gctccctggg gctggaggct catccatcag 300
ctgccggagg tgagaggctg ccttgtccag ttttgacaat tccagctgga gggaagaaag 360
```

```
420
cttttgttgc ctctgagtcc ctgcctcccc ttctgatggg gtcctggctg tgaggctatc
aagetgette tgeaacttgt acetteggge ggetaacaga ggtagetgga tetgegggte
                                                                      480
                                                                      540
caccaggece tgeageteea tgtagaettg ageegtgtea etgagtggag eetgggeeea
                                                                      600
gccggaggga gctgctgtgc ctgggggtaa caggcccaca gccccacagt agcccagggt
geccagggge tecaagaagg cetegaagag gecetggtee ceaggetetg agetetgeag
                                                                      660
cagcactcgg ggccgggctt tggtgagctg gtacgtggct tggagagccc ttagcacctg
                                                                      720
cacgacetet tggacecggg agaagegeeg etceagetet ggetggegee agtgeteeaa
                                                                      780
                                                                      840
gctgcaggcg ctggggtagg gggcaaccga gatgctgggg gcaggggggc aaccaggcct
ggggggcage etetgecaga getetteage caggaaggge ateagtgggg ceaggaggeg
                                                                      900
                                                                      960
gaggccgagg tcagcgcagg agaacaggac ctgagggggc cccagggggc ggggcgagtg
                                                                     1020
ccacagcacg ggcttcacag cctccaggta gacgtcacag aggttgtgaa gccagaagtg
gtgcagggca tgagtgacga gcgagagctc tcgggtgagg aagccccgct cacactcctg
                                                                     1080
ggcagccagg gcaaggcggc tcaggatcca ggcatccatc ggggaggagg gagacagctc
                                                                     1140
ctcagcagac tgtggcacaa atttctcccc taaagcattg aggataaagc gaagagccct
                                                                     1200
                                                                     1230
cgtgccaagc ttggcgtaag catgaacagc
```

```
<210> 5238
<211> 2222
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1985)...(1512)
<223> similar to gi603953 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5238 aatggagggc agtagaaaga ccacagctcg cctcaacctg gggtttatgg ggctcaatta 60 ttatececeg ecagetteca aattgttttt gtttactttt tttttgttte attttetagt 120 180 tattttattt tgttttttt tttttaaaaa tatgtttatc tttaatgatc caagattctg 240 caagtcacgc tgatataccc agaattgggt ggaaatacag catctcagca gtgctactgc 300 cagectgggg gtggggaget ggatgetgge tgaaggaeee ecatggtgaa gtegatteea acctcacqqq agcctcagtg ccctatctcc atggaaacca gcctggcact gggatggggc 360 cctagggagc ctgcatgaac atctctgaga ggtatttccc attaaaaaca accacaggtg 420 cccacccca ccccaagcta ctgcccagct ccccctcctc tctgtgttgt cggccaagat 480 540 aaaggaaatg ggagtgacca cttaacgaca aacaaaagca gattgtacct cctattaggg 600 aagaaaaagg aagggaaagg gtagtaaggg agctgcactt caagctcaga attctgccaa gaccctagag cggctatggc agacagcggt gcatgactgc cagagggcag cgctacccaa 660 accortggag gtaccotttg ttactgotgg ggcccctgct gctgtggggg aaagacgggt 720 cttcaaggct gcttcctgcc atctagcgct gcccaatgtt tggaccaaaa ggggatggca 780 cctaggatgg ctctacaact ccatactcag tacgaaaaga gggctcccag gatctcaatg 840 900 tggtatcagg gatgagagtt tgcccaaact ccctccttcc caccctgctg gactgtcaga gctctgggct aggaagaact ccagggaagg ccaggatgag tgggggaagg agacaagaaa 960 1020 atggtctcca atttggcatc aaaacagagt aagttcaaag aaacaaaacc ttgatttttt 1080 tatagcaggt tetectggee ageteatgae ageaggtete cacceaetea gggatggeee aataaaaagt tgggcaaagc aagggcatgg ctaccctcag ggcagtgcat ggaactcaga 1140 aaagtgagtc tacaggatgc aggagagaac agcagagccc acagctctgc cactctgata 1200 1260 tgtcctccat cagtcccacg tgccctaggc actgacctca tacctgcctc aggagcagct teetteagge tgagteetgg caggggaaag tteecaggea ggtgteecag aaggaacatg 1320

```
agtgttctct gcagggccct gcctgagctc ttcaggggat ggagaggagg ccacccactc
                                                                     1380
ctcatgccag gtgcaatgct ccccagtccc ttttcaagag ggggaagaag ccagcactgt
                                                                     1440
gggccccagg tggccccatc tcaggaatga cagggcattc tgcaggggtg gcacattctg
                                                                     1500
                                                                     1560
aggetettag geeetgtgea tetggatgaa ggagaggaeg teeteettgg acagettgte
                                                                     1620
ctggtcctgg ggcttctggg agtcatgcac acgaatgcca tcccccact cccagaagag
                                                                     1680
ccggccatag tagcaaatgt gaaatggggc aatggagtct gcagggaggt caaaagtaga
                                                                     1740
gtccttggtt ttcttgttgt agaagaactt cttcttgaag cttttgctga atcccatagt
                                                                     1800
ccagggetca ttcactgtcc tgacgatgta gaggeccatg ggtacaaagt geeggteate
acgccctgtg tagctgagct ttggggtgcc actggagccc ttgatgatct tcatctccaa
                                                                     1860
cctgacaaaa atcttctcca tctcttccag tctgtacacc tccttcaccc tgatgggatt
                                                                     1920
catgtcgggc cgactaggct tggaaacggc tttcacaaat ttctcggcaa gctgaattct
                                                                     1980
                                                                     2040
acaatccaaa cagtototot gagaggcaag ccaaggatgo otocaccago accoctacco
ccagggcatt ttcacagctc cagtaggaga accttctgaa tctgcggcaa gactgctcta
                                                                     2100
agaggeagea cccatgtece ccaggaagee egecetgeee ttetecaceg aegtetttat
                                                                     2160
tectgegeet egtgeeaagt tgggegtaat egtgttetae tgtateaate geaeceeeee
                                                                     2220
                                                                     2222
```

```
<210> 5239
<211> 2842
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2844)...(911)
<223> similar to gill63174 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5239
caagggettt caggtettea ttettttgga gaacgeecta gaccatgagg gtatgggaag
                                                                       60
teteatggca ccaggagage cacetecagg gtgaggggat gtcagacagg aggggeteag
                                                                      120
gagggegece tecaggetga ggggatgtea gacaggaggg gaccaggagg gegeceteca
                                                                      180
ggctgagggg atgtcagata cgaggggacc aggagggcgc cctccaggct gaggggatgt
                                                                      240
cagacaggag gggatcagga gggcgccctc caggctgagg ggatgtcaga catgagggga
                                                                      300
teaggaggge accetetagg etgaggggat gteagacatg aggggateag gagggeacee
                                                                      360
tetaggetga ggggatgtea gaeaggaggg gaecaggagg gegeeeteea ggetgagegg
                                                                      420
agacttttac tetgtgattg acaacagtte etgggeaate etagateagt agteagaaaa
                                                                      480
cettaactgg aaaagagaat geatggegtt tteatttete tgaggaagee gagaaaettt
                                                                      540
aattaggtga cggggttccg agcacttaag cagatggggt gcggtgaagg cccagggagg
                                                                      600
aggagggcag ggaggtgcac gtcctctgtg ccccacacac tttcaaccac tgcaacaaac
                                                                      660
aagcacccaa gagaggctgt gcggcagagc cctgcaccca caggcctttg acagcacagt
                                                                      720
gaggggcctc cgcacgtggc ctcgggacgc tcactcgacg cacacccggt gcatcacact
                                                                      780
ggcacctaaa gacaggccgt gcagctaaaa ggagcacgtg tggccaagga gagcaatcag
                                                                      840
ctgtcccgcg tttctaaagg cagggaccga ggctgtggag gggcgagcag ggcaggccgg
                                                                      900
eggaggetae ttgageaget tggeeaegtt caggetggge accaeatgt cettgaagag
                                                                      960
gggcacgtag ctggggctgg cctgtgctgg gccctgctcc agggtctcca tgatggtctg
                                                                     1020
cttcatgtca cggctggcgt ccccacgcac agccagcagc gcaccgatgt ggtcatccct
                                                                     1080
gatgtetgga taettgetga eeagagtgga gaeeteeagg tagageagag aagggtetgt
                                                                     1140
cagettgate aetteggeea cagecaegat ggtgtegeag tateegteea egtetteeee
                                                                     1200
gaaaccggac gccagettec ggaacaggaa gegcagetge tetgeeteec taaccatett
                                                                     1260
```

```
cteggeacce teettgeget ceteeggget eeggaaggaa atgegettet geatgacege
                                                                     1320
ccgcaggtac tecaccacca cgcgccggtg cgcctcggcc gtcatcctct tcttatacgg
                                                                     1380
ctttttaatt ttggcaaaat cgttgaaata gtcttccacg gtgacacaga taatgtctac
                                                                     1440
                                                                     1500
agegtttgac cctaatagcc acttcttcgt catcaattca ttcagatgtt gctccaggtc
                                                                     1560
caggaagacc tectecagea aacegetgea geceteette gegatggegt etaaaateee
gtccatgctg ggctggctcg gagacacacc ctcttccact tcattcttta aatactttct
                                                                     1620
ttttaaactg actatggatt ccttgaaggt ctggcagttg ttgatgatgg cgatcatgta
                                                                     1680
ctgaacgtag cagtgagggt gctgccgatt cctcaggtgc tcttctttat acagctgcgc
                                                                     1740
ttcatcttta tatctgctta ggaaagaatt catctgctga agacataaaa ctagtacctt
                                                                     1800
tgttttcaaa tcttcactta tctgagcagc aacttgaaga ttctgttcaa acatctggaa
                                                                     1860
                                                                     1920
gacaatggca gggagtgtgg tetggtagta ceegteetgg teggettetg getetgtete
tttgacccag tctttcttgt ctgtctccag cgctttccgc agccaggcga tgatgtttga
                                                                     1980
agtgagcgtg gacatgtacg tgtcaagcag ctcagagacc acgtgtggag aaagcaatgg
                                                                     2040
etecagggtg eegacateca etteegggge eagetecaeg tteeteatea teteagtaet
                                                                     2100
tgtgtaggtg tttaagaccc acgtcaagag gctcacgatc tcattggctt ccaggtcttc
                                                                     2160
cgatgcgagg tcctgcatcc gcgtgctcag ggcttggtgg tacatgttca ggaggttctt
                                                                     2220
aaagatetea tagtggggag gaaageactg aaceateagg tttttggega caatgaggte
                                                                     2280
atccaggacg tactteetta taattteeag gtggeggaca agccacatet tgteagacte
                                                                     2340
tetggtatet geetgtgtge eetcaattet ggtggteaca gteeteteea agatggtgaa
                                                                    ,2400
cattiticted ticcaattet tgggeeteed aggaggaada aaggeagtit getittieg
                                                                     2460
gtcaagtatg cgcctgtcaa ttttctcttc cctttcaatg atcctgacaa ctgagaccag
                                                                     2520
caaggtgggg tcacggcgga cagtgaccag tgacctctgc agcaccatcc acagctgctt
                                                                     2580
agccagetea teagagagee cetgegtget gecaaagtag ecatggatga gggteatgte
                                                                     2640
acgogtgttc ccactgtcca tgcggtactg ctcgtacatc agcccgtccc gggagcattc
                                                                     2700
caggtccatc agcttccggt gggcttgcag gagtgcccct tgttcaatta ggtcctgggt
                                                                     2760
ctccctcaca atctcaggea ctgagaagat gttcttgagg ttctccacgg ctgcggcgag
                                                                     2820
ctggctgtgc tgcaccacgg cg
                                                                     2842
```

```
<210> 5240
<211> 1299
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (47)...(542)
<223> similar to gi4006818 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5240
eccaegegtg egatgtttgg ttgeceetee etgtageett tteetggggg gtggggeeee
                                                                       60
egeaggtgtg attegeteae tgeaeageet gggeegeetg gageatgeet tetgeaeaga
                                                                      120
gacceggece tacaaccagg gagecegget gaeggeettt gagetggtet atgageagat
                                                                      180
eccegecace ettateaceg acageatggt ggetgetgee atggeecata ggggegtgte
                                                                      240
agetgtggte gtgggagetg accgegtggt tgeeaaegge gacaeageea acaaggtggg
                                                                      300
cacctaccag ctggccattg tcgccaagca ccatggcatt cccttctacg tggctgcccc
                                                                      360
cagetettea tgtgacetee gtetggagae eggeaaggag ateattattg aagagegaee
                                                                      420
gggccaggag ctgaccgatg ttaatggggt ccggattgca gcacctggga ttggagtttg
                                                                      480
gaateetgee ttegatgtea eeceeeaega eeteateaet ggtggeatea teacagaaet
                                                                      540
gggggtettt geceetgagg ageteeggae agecetaace accaecatet etteeaggga
                                                                      600
```

```
tggaacceta gatggaccec agatgtaacc aactcaactc tecetageet geetetetag
                                                                      660
gtttttcaat acatttcttg aatggctacc caaaagctga ccgtccagcc cctgaccaca
                                                                      720
                                                                      780
cttgttccta gtgcagggag ctcagacagg gccttccatc tagagcccag cacctagagc
caggetgeee agatteaaat eetgaeteeg eeacttttee caetgtatga tettgggeaa
                                                                      840
qtcacttcac ctctctqtqc cttqqtttcc tcatttataa aatqtqqata acagqccqqq
                                                                      900
cgcagtggct cgcgcctgta atcccaaggt gctgggacta caggcatgag ccactgtgcc
                                                                      960
tgaccttaca gcagtatttt ttaaaaatca aaattaatgc aaaaatccat gatgaggcca
                                                                     1020
ggcttggtgg ctcatgcctg taattccagc actttgggag gatcccttga gcccaggtgt
                                                                     1080
ttgagaccag tttgggtaac atgggaagag cttgtctcta caaacaaaaa tttaaaaaca
                                                                     1140
atgagetggg catggaacte acacetetag ceceagetae teaggetgag gtgggaggat
                                                                     1200
ggettgagee caggagttea aggatgeagt gtgetttgat tgeactactg egetteacee
                                                                     1260
tgagcaacag agtgagaccc catctcttta aaaaaaaaa
                                                                     1299
```

```
<210> 5241
<211> 728
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (30)...(560)
<223> similar to gil669498 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5241
cegggtegae écaegegtee geaaatatát gtgaggtgtg caacaaatgg ggaeggetgt
                                                                       60
totgotgoga cacitgicca agatoctito atgagoactg coacatocca tocgiggaag
                                                                      120
ctaacaagaa cccgtggagt tgcatcttct gcaggataaa gactattcag gaaagatgcc
                                                                      180
cagaaagcca atcaggtcat caggaatctg aagtcctgat gaggcagatg ctgcctgagg
                                                                      240
agcagttgaa atgtgaatto otootottga aggtotactg tgattogaaa agotgotttt
                                                                      300
tegeeteaga acegtattat aacagagagg ggteteaggg cecacagaag eecatgtggt
                                                                      360
taaacaaagt caagacaagt ttgaatgagc agatgtacac ccgagtagaa gggtttgtgc
                                                                      420
aggacatgcg teteatettt cataaceaea aggaatttta cagggaagat aaatteaeca
                                                                      480
gactigggaat tcaagtacag gacatctttg agaagaattt cagaaacatt tttgcaattc
                                                                      540
aggaaacaag caagaacatt ataatgttta tttagccatt cttatctcct cccttcagat
                                                                      600
cetetggeag etagetaege aatgtgeetg tggteecaet aatetgtgae tgeteetgtg
                                                                      660
gaaactccac atcacaattc tccaaaattt atcattgcca ttttaaaacc gtcttttcag <
                                                                      720
ctttcaat
                                                                      728
```

```
<210> 5242
<211> 1922
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (1)...(1827) <223> similar to gi5630076 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5242
atgggaagtg tcacagttcg gtatttctgt tatgggtgcc tttttacatc tgcgacctgg
                                                                     60
120
cccgtcaagg ggtctgggcc ccacggacca tctccaaaaa aattctatcc ccgtttcact
                                                                    180
cgaggcccaa gtcgagtgct cgagccacag ttcaaagcaa acaaaattga cgatgtgata
                                                                    240 -
gacagtcgtg ttgaagatcc agaagaaggc cacttgaaat tctcttctga attaggtatg
                                                                    300
attittaatg aacgcgatca agagttgaga gacttgggct atcagaaaca tgcttttaat
                                                                    360
atgettatea gtgacegett gggetaceae agagatgtge cagacacaag gaatgeageg
                                                                    420
tgtaaagaaa agttctaccc acctgacctg ccagctgcta gtgttgttat ctgtttctat
                                                                    480
aatgaagegt tttetgeett getteggaca gtgcacagtg teatagaceg caegecagea
                                                                    540
cacctgcttc atgagatcat ccttgtggat gatgatagtg actttgatga tttgaaagga
                                                                    600
gaactagatg aatatgtcca aaaatacctc cctggaaaaa ttaaagtcat aagaaataca
                                                                    660
aagcgtgagg ggttgattcg agggagaatg attggcgcgg cccacgcgac aggagaagtc
                                                                    720
cttgtgttcc tggacagcca ctgtgaagtg aatgtgatgt ggctgcagcc cttgctggcc
                                                                    780
gecatcegtg aggaceggca cacegtgggg tgeccagtga ttgacateat cagegeegac
                                                                    840
acgctggcct acagctcgtc ccctgtcgtc cgcggagggt tcaactgggg actgcacttc
                                                                    900
aaatgggatc ttgtccccct ttctgagcta ggacgagcgg agggagccac tgcaccaata
                                                                    960
aagtcaccaa caatggctgg aggtttgttt gccatgaaca gacagtattt ccatgaactt
                                                                   1020
ggacagtatg atagtggcat ggatatctgg ggaggagaaa atttggaaat atcatttcgg
                                                                   1080
atctggatgt gtggcggtaa getetteate atceettget etagagtagg acacatttte
                                                                   1140
cgaaaaaggc gaccatatgg atctcccgaa ggccaggaca ccatgacaca caactctttg
                                                                   1200
eggetggeac atgtetggtt ggatgaatac aaggageagt attttteett aagacetgae
                                                                   1260
ctgaagacga aaagctatgg caatatcagt gagcgtgtgg aactgagaaa gaagttgggc
                                                                   1320
tgtaaatcat ttaaatggta tttggataat gtatacccag agatgcagat atctgggtcc
                                                                   1380
cacgccaaac cccaacaacc catttttgtc aatagagggc caaaacgacc caaagtcctt
                                                                   1440
caacgtggaa ggctctatca cctccagacc aacaaatgcc tggtggccca gggccgccca
                                                                   1500
agtcagaagg gaggtctcgt ggtgcttaag gcctgtgact acagtgaccc aaatcagatc
                                                                   1560
tggatctata atgaagagca tgaattggtt ttaaatagtc tcctttgtct agatatgtca
                                                                   1620
gagacteget cateagacce gecaeggete atgaaatgee aegggteagg aggateecag
                                                                   1680
cagtggacct ttgggaaaaa caatcggcta taccaggtgt cggttggaca gtgcctgaga
                                                                   1740
gcagtggatc ccctgggtca gaagggctct gtcgccatgg cgatctgcga tggctcctct
                                                                   1800
tcacagcagt ggcatttgga aggttaaggt ggatgctgtg gcgggaacgt tgcttcatca
                                                                   1860
ggcgttgcct ccggtgtgga gtttggggct ttaggaaagc ctgggttggg tggagcagaa
                                                                   1920
                                                                   1922
```

```
<210> 5243
<211> 2234
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(398)
<223> similar to gi2352427 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5243
gctatgttcc caatttatta ggtatcatac cttatgcagg catagatctt gctgtgtatg
                                                                       60
                                                                      120
agetettgaa gteetattgg etggataatt ttgcaaaaga ttetgtaaac eetggagtea
                                                                      180
tqqtqttqct qqqatqcqqt qccttatcca gcacctgtgg tcagctggcc agctacccat
tggetttggt gagaactege atgeaggete aagceatgtt agaaggttee ceacagetga
                                                                      240
atatggttgg cetetttega egaattattt ecaaagaagg aataccagga etttacagag
                                                                      300
quatcacccc aaacttcatg aaggtgetee etgetgtagg catcagttat gtggtttatg
                                                                      360
aaaatatgaa gcaaacttta ggagtaaccc agaaatgatg ttgcattttt tgctttagcc
                                                                      420
tgataattga aactttcaac aatctctgga gtgacttttt ctcctcgaat tgaaacaagt
                                                                      480
ctatggcaaa agaagctgca tttttttcac aaaagggaag atggtaacaa tggtcacttc
                                                                      540
                                                                      600
aaacttttgg gctaaattat atgtacacag aaatgttcaa aatcatagtt ttaatgtgtt
ttgaaaaggc cacacaatta tactttatct tttcttaata atcctgcaaa tctctgccct
                                                                      660
gaatccgaaa tctgaaaatg tactggcttg aacaaaattt gttttgtgtg ttagagttat
                                                                      720
aaatcattaa totttattto gggtggttta cgtttatgco agttoottta tatttaaatt
                                                                      780
tettgtttta tatattttga atgtetttat agatttettt aaattteett atagaaceat
                                                                      840
taatagaaaa tcattacatt taaaatatac cttacagcaa aagcatccaa ataagtatag
                                                                      900
ggtttatgtc cttatttttc tttcagctga atacgaatga acacagtggt ggaatttctg
                                                                      960
aagggaagtg atgaaattat atttatttca gtgggcactt ttccatttta ccactgtacc
                                                                     1020
attatttggt tcctggagtt atacactaat tttcagtata ttactgttaa attaccaaca
                                                                     1080
caaggcaatt tatttgaaag attccgttta tcctgccatt gctttgaaaa gcagcaggaa
                                                                     1140
acgaaatcct ttgacttgta tcagettetg cagageatet ttgtttteet ttgteetttg
                                                                     1200
tttcctacct tttgaatcag attccgtttt agtcaggaag acttcttggg accattctta
                                                                     1260
gtaacctgaa atttcttttt taattgcatg aagtggattg atcatgagca aatgatgtgc
                                                                     1320
ttatttctcc ctcactgttg aatatctttg aacttgctgt tttcaatatg ggcagcacaa
                                                                     1380
aggtgagaga tacatattaa tagtagtatg tattactett atacattaga tacetatatt
                                                                     1440
taaatgaaag gcccaatttg taaacatata cattcatatt ctctcttgcc ccaagtttta
                                                                     1500
ggaacatgtt aggatatagg agacttaatt tataataatg agagcatttt tttattttac
                                                                     1560
taaagccatt tttatagtca actatctttt cttatttgtg tgattagaac ttagaaaaat
                                                                     1620
atttactagt tgaagttatt atcagttttt aatttagttc ttaaactcat ttcacttcta
                                                                     1680
ataatttctg ttataaattt ccagcatttt aatgaaaatc taatgatgta ataggcattt
tetttatttg aacetacete ttttatttte tgaaceaaag agaaagatgg actggtgttt
                                                                     1800
gtgaaacatt tttaaaaatg tagtttcatt tatattagtt atgtttgata aatgtctcag
                                                                     1860
tatttttata atatgataag cetgggatte taettttagg gttatttgta ettttgagta
                                                                     1920
atatataaag tgacaatatt aaggtacatg atcagctctt tctattttta ctcgtaaaaa
                                                                     1980
ttatggaaat gaataatttt gctaacaact ttgaaatttc aaacttctgg aaaatatgaa
                                                                     2040
aatattcatt gttcattatg aatttaaatt gtaaggtatg aatgtgattt gtctgtacat
                                                                     2100
cttgtatctt ttccaaaaaa tgattctgta tcttttggaa aaaagccgag agttgaagat
                                                                     2160
agtatattic tggtagtact gaatatttac ttacagtttc tatcaaaaat atatatttgt
                                                                     2220
ttctaaaaaa aaaa
                                                                     2234
```

```
<210> 5244
<211> 1011
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1012)
```

- < 223 > n = a,t,c or g

```
<220>
<221> misc_feature
<222> (4)...(526)
<223> similar to gil550785 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5244
cccgggtcga cccacgcgtc cgaccagcag gcggagaggc aggtgaggga catgttccgg
                                                                       60
gaggacgtcc taaaatggat ggtcatcgtc ttcaccagga aggaggacct ggccgggggc
                                                                      120
tecetgeacg attacgtgag caacacagag aaccgggeet tgegegaget ggtggeegag
                                                                      180
                                                                      240
tgegggggcc gggtctgtgc ctttgataac cgggccaccg gccgagagca ggaagcccag
gtggagcagc tgctggggat ggtcgagggc ttggtgctgg agcacaaggg cgcccattac
                                                                      300
                                                                      360
tecaaegagg tgtatgaget ggegeaggtg etgegetggg eaggeeetga ggageggete
                                                                      420
cggcgggtgg cggagcgcgt ggcagccagg gtgcagagga ggccatgggg cgcctggctg
                                                                      480
teggeeegge tgtggaagtg getgaagtee eecaggaget ggaggetggg eetggeeetg
                                                                      540
etgetggggg gegegeteet gttetgggtg etgeteeaea ggeggtggte ggaggeegtt
geggaggteg ggeetgaetg acagegeagg teetaaaaet gaaggeaaet tggttaaggg
                                                                      600
aggetgaatt ettggagetg aagggaaaac tteatteeaa eggaaggaat eetgtagttt
                                                                      660
                                                                      720
caggeatagt tttaatgaca cagaaaactt tgctgcatca cctttgcaac tttgccaaag
ctcagagttc actttttaag tttttaactc attttaaatg atgtgtatgc agagttttaa
                                                                      780
aataaattcg tctaacaata acttcctttg gtagttttgg tagtctaatg tcaagtagct.
                                                                      840
tgtagtgggg acaaacgcat ggcacaggga aaacaagtgc cattattttc gagcttttta
                                                                      900
aaaaatttag actgcccctc cttgataatt ttctagttct tatacatggg tagataggtt
                                                                      960
cctttgtgat ccttgtagac ttttagcatc aataaaagaa atgtggnggt a
                                                                     1011
```

```
<210> 5245
<211> 1201
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1135)...(519)
<223> similar to gi3327094 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5245
tttttttttt ttcattctaa gagcagtttt tatttagaaa tgtgcttcca caacttggtg
                                                                       60
gccacctggg ggcaggtagc cccggcttgc ttgttctctc tttcctagcc caggaatcgg
                                                                      120
gtccttgggt ctaaagcaca gggccaagtt ctcaaggatc aacatcccag acagctccca
                                                                      180
tggtctgggg cttggagctg gtatgaaggg tgaaccaggt tccatcctgg actgtttatg
                                                                      240
gttggagggc ctgggcccct ggcaccagga cctcagctcc ctctcctagt aagagctggg
                                                                      300
atcacccaca ggccagctgt ggccaggtcc tggtggatat gacattggga agaacaaggg
                                                                      360
gctaagagag gctaattttc tggtgctgga tccagtttat cttcctgagg ggtggaagcc
                                                                      420
ggggcaggag ceteateece accattgagg gaettetget geteattget gttgggegag
                                                                      480
ggggtcctgt tgccctggga tccccagcgg gtcaggcgct ttagggagga gtcacggtgg
                                                                      540
gcaagcagag ggggctggaa gcctgagaag gagctgctgg tgaccggacg cttatctcca
                                                                      600
```

```
ggetcaattg gatgeateag ceggtteate tggacattee agtgttteac gttggtgetg
                                                                      660
gcctggcgca gttttctctg ggcagcctcc acatcctcgt cagccctctg ccggttctgc
                                                                      720
egeacetect ceagetgetg etgggeetge tgeagggage ggetetgetg tgecatetee
                                                                      780
tgctgcagct cttccttctc ctgctgcgcc cgttcgatgt agcgctcctg ctcctccttc
                                                                      840
agetgeatea aetgetteag ettetettee teetetteea geagtetggt etgagegatt
                                                                      900
                                                                      960
egeacagatt etteateteg eegagettte acetetagtt geagggeete etgeaacege
tgetgeatet cetecagete ettgatgege tgeegetgee gggeageete etecteette.
                                                                     1020
agetecatet cageetgeat ggaggeeegg geetgeteeg eetegegeag ttggeeeteg .
                                                                     1080
agegeetget geagetegeg gtgetggetg eggegeegtt ceteeteete etgeageage
                                                                     1140
cgctcggcct gccgatgcgc ctcctcggac gcgtgggcgg acgcgtgggc ggacgcgtgg
                                                                     1200
                                                                     1201
```

```
<210> 5246
<211> 1605
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1606)
<223> similar to gi6002605 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5246
atgggcatcg tggagccggg ttgcggagac atgctgacgg gcaccgagcc gatgccgggg
                                                                       60
agegaegagg geegggegee tggegeegae eegeageaee getaetteta eeeggageeg
                                                                      120
ggcgcgcagg acgcggacga gcgtcgcggg ggcggcagcc tggggtctcc ctacccgggg
                                                                      180
ggcgccttgg tgcccgcccc gccgagccgc ttccttggag cctacgccta cccgccgcga
                                                                      240
ccccaggegg ceggettece eggegeggge gagteettee egeegeege ggaegeegag
                                                                      300
ggctaccagc cgggcgaggg ctacgccgcc ccggacccgc gcgccgggct ctacccgggg
                                                                      360
ccgcgtgagg actacgcgct acccgcggga ctggaggtgt cggggaaact gagggtcgcg
                                                                      420
ctcaacaacc acctgttgtg gtccaagttt aatcagcacc agacagagat gatcatcacc
                                                                      480
aagcagggac ggcggatgtt cccattcctg tcatttactg tggccgggct ggagcccacc
                                                                      540
agccactaca ggatgtttgt ggacgtggtc ttggtggacc agcaccactg gcggtaccag
                                                                      600
ageggeaagt gggtgeagtg tggaaaggee gagggeagea tgeeaggaaa eegeetgtae
                                                                      660
gtccacccgg actcccccaa cacaggagcg cactggatgc gccaggaagt ttcatttggg
                                                                      720
aaactaaagc tcacaaacaa caaggggggg tccaacaatg tgacccagat gattgtgctc
                                                                      780
cagtecetee ataagtacea geeeeggetg catategttg aggtgaacga eggagageea
                                                                      840
gaggcagcct gcaacgcttc caacacgcat atctttactt tccaagaaac ccagttcatt
                                                                      900
gccgtgactg cctaccagaa tgccgagatt actcagctga aaattgataa taaccccttt
                                                                      960
gccaaaggat tccgggagaa ctttgagtcc atgtacacat ctgttgacac cagcatcccc
                                                                     1020
teccegeetg gacecaactg teaatteett gggggagate actaetetee tetectaece
                                                                     1080
aaccagtate etgtteecag eegettetae eeegacette etggeeagge gaaggatgtg
                                                                     1140
gttccccagg cttactggct gggggccccc cgggaccaca gctatgaggc tgagtttcga
                                                                     1200
gcagtcagca tgaagcctgc attcttgccc tctgcccctg ggcccaccat gtcctactac
                                                                     1260
cgaggccagg aggtcctggc acctggagct ggctggcctg tggcacccca gtaccctccc
                                                                     1320
aagatgggcc cggccagctg gttccgccct atgcggactc tgcccatgga acccggccct
                                                                     1380
ggaggctcag agggacgggg accagaggac cagggtcccc ccttggtgtg gactgagatt
                                                                     1440
gcccccatcc ggccggaatc cagtgattca ggactgggcg aaggagactc taagaggagg
                                                                     1500
cgcgtgtccc cctatccttc cagtggtgac agctcctccc ctgctggggc cccttctcct
                                                                     1560
```

```
<210> 5247
<211> 662
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (436)...(323)
<223> similar to gi34388 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5247 attititti tgtgttttc ttcattctaa tttcatttgt tctgttatgc atgtctttc 60 ccacacatat tccaaatctt ttaggggagt aaaagcagtg aaaataacaa aattatgttc 120 cacatgccca agtcacaaaa tgtattaaat atgataaagt agcggctgta caaaattgga 180 caaattgaca aataacaatg ggtcaggaac actgtatctg tttgatacag gagtgatatt 240 gaaaaagggt totgttttta otttototta tttgtoatca aaaaagaaaa ttgcatotto 300 cataaacaga ttccagaaaa agaaatttat tgttacctct gcgaagttgt ggatagcttc 360 tggtggtaag gatggtattg aacacgttta cgtctgtccc ctttctcctt tctcctgctt 420 catacaagge etgteaagaa acacaaaagt aaacaettea etatetgetg aaatgatate 480 tgcacaataa tgttagacct tgtcaaagat tatataggca atcgctttgt gcccaataca 540 atcagagtag tcaacaataa gattgcaagt tctttaaaga tagggacctt attttgtttg 600 tcaaatatct tccacagttt ctctcaaggt gccttgtaaa cactagagtc tgaatatatg 660 662

```
<210> 5248
<211> 1116
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (105)...(591)
<223> similar to gi5733600 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5248
caacttcaga ttaccagaat gacaaggact agaattggat atttcaggcc actgctctca 60
gccagacccc acccaggccc agcctcaccc tgcagggtct agagggcact ctgatggttc 120
taaaacatcc ctacccaaga aaagtggaag aaccctccat ttatgaatct gtccgggttc 180
acacagcaat gcagacagga agaacagaag atgaccttgt gcccacagca ccttctctgg 240
```

```
gcaccaaaga aggttacctc accaaacagg gaggcctggt caagacctgg aaaacaagat
                                                                      300
                                                                      360
ggtttactct gcacaggaat gaactgaaat acttcaaaga ccagatgtca ccagaaccaa
ttcggatcct agacctaaca gaatgttcag ctgtacaatt cgattattca caagaaaggg
                                                                      420
taaactgttt ttgtttggta tttccattca ggacatttta tctctgtgca aagaccggag
                                                                      480
tagaagctga tgagtggatc aagatattac gctggaaatt gtcacaaata agaaaacagc
                                                                      540
                                                                      600
tcaaccaagg ggaaggcacg atccgatctc ggtcgttcat ctttaaatag atctttcttg
                                                                      660
ccaaggaatg ctctggccca ggagcaaggt ggaatgtttc cctgacgctg tgatctgcag
caggetteaa atgaaaaceg aetaaggatt ttettteaaa aacaaateag aageagatge
                                                                      720
                                                                      780
tgattgggac ccatatacca cgttgctgac tcacgttgct gcccttccat gatgttgcca
tctccttgag aacactgaag caatcaccat tctgatagaa agtgcttaaa ccaccactct
                                                                      840
                                                                      900
taggtetget cactettaga acacacaatg gaagaggaag ggtttttgtt tteacteatt
gtggtcccca agcctattga cactagttgc ctagagtccc actgtgagtc atggtcagcc
                                                                      960
tgtctgacat ccaggttgtg ctattaacca agaaggaaac agatacttgg aggcttagat
                                                                     1020
gacttctgca ggatttatat tcagatagaa aacatcaaat attttcaggg gagaggtttt
                                                                     1080
tttttttaat ttttccccct ttatacaaaa aaaaaa
                                                                     1116
```

```
<210> 5249
<211> 1189
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1190)...(967)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5249 60 gtgtcagggt tgggaccaga gcaggaacac acgcaagaag ggactgagaa ttgtatcaac 120 agcgcaaaag aagtcaaagg aattacttac gcataaaatg aggactgttc ctcagagatg 180 agtcagtcct gagaagccaa ccaagccggg tactctgagt ctggatccga ccttgctaga 240 aatacggtct gaggcagcag aggttctatg agagtccaca gaaggtcagc acaggctaag 300 gtaaaagcag ggcaataggg ttcttgtgtt ctattggcga aagtagaata gaatagaaca 360 gaaaaactga gtgggcaaaa tgagaattgg caaaaaggta tcattaggct catacctacc 420 acaactetac agecetacea ettaceagaa tggatagatt cetagtegtg taaccataaa 480 aacagcactg aagatcacaa aaagggtgtc acagagccgc tgatacttgg cataattggc 540 cagtttggct gcctggagaa aggaagaaag aattgagctg gggagaaagt cattcctctc 600 660 ataggaagaa aagaagagaa gaagaagatg gagaaagaga gattgggttt ttacctccag caagaagtct gagacatcat gtagacacat gatcagagtt cccactcgaa tcatattgtt 720 gatgtaggag aaggagataa gcccaatggt gaccaagtga tgcacaaaca tgatcaggaa 780 gtcctaggaa ggaatggaaa tagaagaggg aggtaaaagc tgggccctag aaacaccagc 840 caacccaacg teetgeatta ttetetgaga atettacece accccatata gaatagttte 900 cattggccgg gcgaggtggc tcatgcctgt aatcccagca ctttgggagg gcaaggtggt 960 cggatcacct gaggtcagga gttcgagacc agcctggcca acatggggaa gccccgtctc 1020 tactaaaaat acaaaaataa geegggettg gtggcatgtg cetgtaatee cagetacteg 1080 ggaggctgag gcaggagaat tgctcaaacc tgggaggtag aggttgcagt gagctgagat 1140 egegecactg cactecagee tgggegacag actgagatte egteteaaa 1189

```
<210> 5250
<211> 1314
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1315)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (38)...(1085)
<223> similar to gi1938462 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5250 ° ggaggcagga gaggccagcg gtggtctcat tcctggaaaa tctcttgtgt ttgcaactat 60 ggagetgetg atgtteattt tagtaeggea tatgeeacat eteagtaeea aggtgteaga 120 ctctccaagt cacatageca ctaaaactcg actatcagaa gaaagtgete gtttggtgge 180 agecacagtt accatactet etgatttace atceetttgt teaccegetg gatgtatgae 240 aatcctgccc acaattctgt tcttaattgc aagaatattg aaagacacag caataaagtc 300 tgcagataat caggttcctc caccagtcag tgcagctctt caagggatta aaagtattgt 360 gacactttca atggccaaaa ctgaggctgg cgttcaaaaa cagtggacag ctctgattcg 420 tagcacgett gettgeatee tggaatatte teaaccagaa gactetgtae etacacetga 480 tgaagtaagc atgctaacag caattgcact cttcctgtgg tctgctagta atgaaataat 540 aggagtecag teattacaga atggetgeat gaacagattt aaaaatgeat taaatteatg 600 cgacccatgg gttcaagcca aatgttacca gcttctcctc tcagtcttcc aqcattccaa 660 tegtgeeett teaacteett atatteatte attageteea atagtggttg aaaagetaaa 720 agctgttgaa agaaacagac cagccagtaa catagagett ttagcggttc aagaaggaat 780 aaaagttett gaaacactgg ttgetettgg tgaagaacaa aacagagtee agetacttge 840 tettttagtt cecaetttga tatettaeet getggatgaa aattettttg ceteageaag 900 ttcagcttcc aaagatcttc atgagtttgc actccagaat ttaatgcata ttggacctct 960 gtatccacat gctttcaaga cagtaatggg ggctgctcct gagttgaaag tgcgtctaga 1020 aactgccgtt cgagcaagcc aagcgagcaa agctaaagcg gctgccagac aaccaggccc 1080 ccgccataca ttctggcacc aacaattaaa gctaaaaaaac aaagtttttt ttaatttgta 1140 atttcattta atttgtatnt atggttggca actaagcccc taattagtga nggccactgt 1200 atcattccag gctanctaat gggtctggtt taatttggaa tattgggatt aatagtgctt -1260 ccaaggtagg gtaaagtgga aataatgctc acaccactta ttggattttt aagg 1314

```
<210> 5251
<211> 2996
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

## <400> 5251 tttttttttt ttttattttg tattggtttt atttaaattt tacagaaacc tgatcagagt 60 taagtatgta attataagtc cagtaacaat ttctacaaaa atgcacatac aatgccagaa 120 ctccttaaaa gcaactaata tcatatttgt gttttgcata aaacatgcat taatatgttg 180 gccaaaatca gtctctacaa gaagagacag tccaatacag tcaataagaa aactagttgt 240 300 gaacaacagg taaaaaaaga ggtttccagt taatgtgaaa gaaggaatag tacctttcat aaaacaagcc cttcagcgct gagttaactg atcggtacta ttgtgctgca cgtaatgtaa 360 cacatcacct ccaagacttg gtcctgattg gtcataggaa gtaagggact ttctggtagt 420 tacatcagat atttgagaag attaaaagtt ttccggacat gatggtatac taatagtgca 480 540 accttgcaaa aagggttcga aacattgtca gacttggaag agttccccag cttgataaac 600 aacctcaaag acaccccgag cetttgaacg gagccetetg cacaaggeca getcaggget 660 caccagcatg teetgtggee acaagacett ecageteeae ataccaecet tegtgaggat 720 ctgcaattag gagcctgagt gccgaagaac atggttgtgc catttetttg aggctttgac 780 tttttataag gcctagttca tctcatccag ggattgggca ctcgaatgaa tacacagatg ctggacacat aaggagtatt aatatacatg gtggccccac agcctgaaat gcttttatta 840 900 acatacatca aggigigiet cegacigica ggaaagaeet iggieeteea gaggeagaga 960 gaagctgagg gttctctatg tatcacaagg catttcctac atagactgag gggtgttaaa 1020 gagateteat ateaactgaa aggaetteee eteaaatgtg gggetetgta caacetteea tgaggatett caaaaaaaag ateteatagt egttagggaa gtggeggtgg acattaacat 1080 tatatacaca aaactcatca ttcgtgcagc ctcgggcctt gtttgtaatc tcttccacag 1140 tetgtetett ccaaaacagg geteeetgee etgettattt caagtaaget aagteaggat 1200 ctgttttctt tagcagattc aagggggaaa aataataatt tattggggtt ctaataacat 1260 tttcataaca gaatatcaaa ataggtccat ttttgatata tgcttatgaa tatccctgat 1320 aatatcaaga aatccagagg acttcgtaaa ccaccaagat ttcacagggg tgagacccgg 1380 tctgttttct aggcagcaga gaagggacta gtatacgggc aaatgttctc caggaagccc 1440 tgtgagcact acagtactga aattctaatt ctagtgccaa tagaatcatg aacgaaaatt 1500 tcacttgaac tgtattagta aaattcataa caaaggcttg cttcctcaac cctgtcatct 1560 gttaatetet eegeetgtga eagacateea gaecagaaaa eeateagtee tggetaetet 1620 ggaggttggg cctagagaaa acaagcccca agatcctttc taagctatga ccaaacctca 1680 gaaaacaggg acgtgaaaga aggagcagac caggcttgag gaagctttga cccaaggcac 1740 cacgatcata ggggcgaggg gacctgtaga ggttttaggt gacgggaaga gagccttccg 1800 tgatgcctgc ggaggaggtt ctggaaggca acagctctgt ggcaaaacac acacatctgg 1860 gagtgaaata acagatcatt aaacaagacc ccaatttgct ttctcaaaac aaaatcaaac 1920 ttaaaaacta tgcaaataac cctgggtgca ctggagtagg agtacactgg agaagtctgt 1980 ggaatgaget geatcagetg agteacagag gaegetgget gtgaagteag catecacaeg 2040 gtggetaetg cagetaaaga gaatgaaggg agegegagge etetecaaac agaggaggae 2100 ggaaaggggg ccaaatgtga accacacctc ttttattcca agaatgggaa gcgcattttc 2160 attggettga atgagaaage tteataetee aetetagetg eagtaataet geateeeate 2220 cactettett etettitttg aetgaaacte ticaaagaac tgetgaatgt eetetetet 2280 aacaaccgtg ccttcatcag caaatctctt gagatagtct ttaagttcag tcttcaaatc 2340 attgtattca caaatgagtt ccacttgctg gactctattc atgctgctaa gggtatccat 2400 taggggateg etectgteag tggeetggge aatetteeet ttgtttteat aageeagaac 2460 tgtgtcgtat tcatctgtca ggaataagac atctagatct ccatacattt tcatacagtc 2520 ttggcaggta cacaacttgc tacgccagtt caggggccaa taggtggcag tgtctttctt 2580 tataagetge ttagetttaa geteetgaag tttgeageea gattttgatt etgegttgag 2640 gctttcattc ttaaacactg tctggagatc agattcagaa ctagagccgg cacatggttc 2700 2760 actgttctgc tctactttaa cctcccggac atcatccttt ccctgttctg gaacatcctc tttgagggta ctatcttgat gctctccatt ttcaggtttg ataacttcct gatcacctat 2820 tocatoaatg ttocgcacca atocatoatc ctoagtggat attttggtta ctgccaattg 2880 tgcagcataa gcccacaaaa aagaacaacg tttcatgcag gcctggcata ccatctcctg 2940

```
<210> 5252
<211> 1286
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (472)...(1050)
<223> similar to gi4981020 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5252
cceggcagag ccgcttcccc ctcctcctg tgctgtctgc accgaggaga gcggcctgcc
                                                                       60
gggtgagtag gtccggggcc tctgggccct cgggggcccc tctcctgcag gctcgaggtg
                                                                      120
ggeggggaga aaggggaegg gegeggaece gggteecaag geeaggeete eettgtgagt
                                                                      180
agactatgca aagaaaaagt gggccaccat atctggaaac tacagtctat gctttgaagc
                                                                      240
gcaaaaggga ataaacattt aaagactccc ccggggacct ggaggatgga cttttccatg
                                                                      300
gtggccggag cagcagetta caatgaaaaa tcagagactg gtgctcttgg agaaaactat
                                                                      360
agttggcaaa ttcccattaa ccacaatgac ttcaaaattt taaaaaataa tgagcgtcag
                                                                      420
ctgtgtgaag teeteeagaa taagtttgge tgtateteta eeetggtete teeagtteag
                                                                      480
gaaggcaaca gcaaatctct gcaagtgttc agaaaaatgc tgactcctag gatagagtta
                                                                      540
teagtetgga aagatgaeet caccacacat getgttgatg etgtggtgaa tgeageeaat
                                                                      600
                                                                      660
gaagatette tgeatggggg aggeetggee etggeeetgg taaaagetgg tggatttgaa
atccaagaag agagcaaaca gtttgttgcc agatatggta aagtgtcagc tggtgagata
                                                                      720
gctgtcacgg gagcagggag gcttccctgc aaacagatca tccatgctgt tgggcctcgg
                                                                      780
tggatggaat gggataaaca gggatgtact ggaaagctgc agagggccat tgtaagtatt
                                                                      840
ctgaattatg tcatctataa aaatactcac attaagacag tagcaattcc agcettgage
                                                                      900
tctgggattt ttcagttccc tctgaatttg tgtacaaaga ctattgtaga gactatccgg
                                                                      960
gtcagtttgc aagggaagcc aatgatgagt aatttgaaag aaattcacct ggtgagcaat
                                                                     1020
gaggacccta ctgttgctgc ctttaaagct gcttcagaat tcatcctagg gaagagtgag
                                                                     1080
ctgggacaag aaaccaccc ttetttcaat gcaatggtcg tqaacaacct gaccetcaag
                                                                     1140
attgtccagg gccacattga atggcagacg gtaagtcttt gtttctattc tcttgcactg
                                                                     1200
gcacaggtga tccctgaaaa ttaaataatt tttgagtgta cacttgagcc caggtgttca
                                                                     1260
agaccagcct gaggaacata gcaaga
                                                                     1286
```

```
<210> 5253
<211> 1380
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(925)
<223> similar to gi307487 in the genepept database release 114,
```

# Run with FASTXY 3.3t00, default parameters

```
<400> 5253
atgggeteca ggetgetetg ttgggtgetg etttgtetee tgggageagg eecagtaaag
                                                                       60
getggagtca cacaaactce aaagcacetg atcacagcaa etggacagca agtgacgetg
                                                                      120
agatgetece ctaggtetgg agacetetet gtgteetggt accaacagag cetggaceag
                                                                      180
ggcctccagt tcctcattca gtattataat ggagaagaga gagcaaaagg aaacattctt
                                                                      240
gaacgattct ccgcacaaca gttccctgac ttgcactctg aactaaacct gagctctctg
                                                                      300
gagctggggg actcagcttt gtatttctgt gccagcagcg tcaaagtagg caccggggag
                                                                      360
etgttttttg gagaaggete taggetgace gtactggagg acctgaaaaa egtgtteeca
                                                                      420
cccgaggtcg ctgtgtttga gccatcagaa gcagagatct cccacaccca aaaggccaca
                                                                      480
etggtatgee tggccacagg ettetacece gaccacgtgg agetgagetg gtgggtgaat
                                                                      540
gggaaggagg tgcacagtgg ggtcagcaca gacccgcagc ccctcaagga gcagcccgcc
                                                                      600
ctcaatgact ccagatactg cctgagcagc cgcctgaggg tctcggccac cttctggcag
                                                                      660
aacccccgca accacttccg ctgtcaagtc cagttctacg ggctctcgga gaatgacgag
                                                                      720
tggacccagg atagggccaa acctgtcacc cagatcgtca gcgccgaggc ctggggtaga
                                                                      780
gcagactgtg getteacete egagtettae cageaagggg teetgtetge caccateete
                                                                      840
tatgagatet tgetagggaa ggecacettg tatgeegtge tggteagtge cetegtgetg
                                                                      900
atggccatgg tcaagagaaa ggattccaga ggctagctcc aaaaccatcc caggtcattc
                                                                      960
ttcatcctca cccaggattc tcctgtacct gctcccaatc tgtgttccta aaagtgattc
                                                                     1020
teactetget teteatetee tacttacatg aatacttete tettttttet gttteeetga
                                                                     1080
agattgaget cecaaceeec aagtaegaaa taggetaaae caataaaaaa ttgtgtgttg
                                                                     1140
ggcctggttg catttcagga gtgtctgtgg agttctgctc atcactgacc tatcttctga
                                                                     1200
tttagggaaa gcagcattcc cttggacatc tgaagtgaca gccctctttc tctccaccca
                                                                     1260
atgctgcttt ctcctgttca tcctgatgga agtcctcaaa caccatttcc atacccaggc
                                                                     1320
attetgggte eccaetggag ggttagtetg aagggeaatg getgggettt ggaaaaceag
                                                                     1380
```

```
<210> 5254
<211> 829
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (427)...(306)
<223> similar to gi3550833 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5254
teggaattee egtgtegaeg atttegtata eagecteetg agtagetggg attacagget
                                                                       60
ccaaccacca tgcccggcta atttttgtat ttttagtaga gacagggttt caccatgttg
                                                                      120
gccaggctgg tctcgaactc ctgacctcgt gatccgcctg cctcggcctc ccaaagtgct
                                                                      180
gagattacag gcgtgagcca ttgtgcccag cccaacctct attttttgg tggtttcaac
                                                                      240
tttattcact gcggagctga acttaggacc attatcagaa caggatctca attctttct
                                                                      300
tactgaacca teettgegat gtactegteg aggtaacage tattgaattt gaccaagtte
                                                                      360
accagcacca gaaggaattc cgaggacaag ccaacatcca tccactgcag gacaaagtca
                                                                      420
gctgggggag aagcggcggc agtttgcgag gacgccgaat ctacatctcc cactcacctc
                                                                      480
```

```
cccctccgc cgcaggacag tgtgtccaaa cccgtcactg ccagaaaccc catcatcagt 540 ccccggcag caacagacag accacgcact gggcccgaag aggctcaggg gagcccaggg 600 caggccggct acgcacggac actaggatct accgccctg gggctgcaca gagggtctgt 660 gccgaggcgg cagcagaagt gtgtatgccg tacactcagg gcccaacccg aggctggag 720 acgccgacat caccagactc ctgggcgttc cccacccca gcagagaacg gctcggaga 780 gacgtgtgca cacttggctg ccggccacgt cacctcagac aggaaaccc 829
```

```
<210> 5255
<211> 3271
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (717)...(1897)
<223> similar to gi4322670 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5255 ctcagaccgt gcagaatgtt acattgtcgc tcactctgcc catcacgtgc cacatttgct 60 tggggaaggt acgtcagcct gtcatatgca tcaacaacca tgtattttgt tcgatttgta 120 ttgatttgtg gttgaagaat aatagccagt gtccagcttg cagagtcccc atcactcctg 180 aaaatccttg caaagaaatt ataggaggaa caagtgaaag tgaacctatg ctaagccata 240 cggtcaggaa gcatcttcgg aaaactagac ttgaattact acacaaagaa tatgaggacg 300 aaatagattg tttacagaaa gaagtagaag agcttaagag taaaaatctc agcttggagt 360 cacagatcaa aactattetg gateetttaa eettggtgea gggeaaccaa aatgaagaca 420 aacatctagt cacagataat ccaagtaaaa ttaacccaga aactgtagca gagtggaaga 480 aaaaactcag aacagctaat gaaatctatg aaaaagtgaa agatgatgtg gataagctaa 540 aggaggcaaa taaaaaattg aaattggaaa atggtggtct ggtgagggag aatttacgac 600 tgaaggetga agttgataae agateaeete aaaagtttgg aaggtttgea gttgetgete 660 ttcagtccaa agtagaacag tatgagegtg aaaccaateg eetcaagaaa geeetggaac 720 gaagtgataa gtatatagag gaactagaat ctcaagttgc acagctaaaa aattcaagtg 780 aagagaaaga agctatgaat tecatttgee agacagcaet ttetgeagat ggeaaaggga 840 gcaaaggcag tgaggaggat gtggtgtcaa agaatcaagg cgatagtgcc agaaagcagc 900 ctggctcatc cacctccagt tettetcace tagegaagee ttecageage agactgtgtg 960 acaccagttc tgcaaggcag gaaagtacca gcaaagcaga ccttaactgt tctaagaaca 1020 aagacctata tcaagaacag gtagaagtaa tgttagatgt gacagataca agtatggata 1080 cttatttgga aagagaatgg gggaataaac caagtgactg tgtaccctac aaagatgaag 1140 aactttatga tettecaget eettgtaete etttgteeet tagttgeett eageteagta 1200 ctccagaaaa tagagagagc tctgtggtcc aagcaggagg ttccaaaaag cactcaaacc 1260 atctcagaaa attggtgttt gatgattttt gtgattcttc aaatgtttct aataaagatt 1320 cttcagaaga tgatataagt agaagtgaaa atgaaaagaa atcagaatgt ttttcttccc 1380 caaagacagg attttgggac tgttgttcca caagctatgc ccaaaactta gattttgaaa 1440 gttcagaggg gaacacgata gcaaattctg ttggagaaat atcttcaaaa ttgagtgaga 1500 aatcaggctt atgtttatcc aaaaggttga attctattcg ctcttttgaa atgaaccgga 1560 caagaacatc cagtgaagca tcgatggatg ctgcttacct tgacaaaatc tctgagttgg 1620 attcaatgat gtcagagtca gacaacagca agagcccttg taataacggt tttaagtcac 1680 tggatttgga tgggttatca aagtcatctc aaggcagtga atttcttgag gaacctgata 1740 agttggaaga aaaaactgag ctaaaccttt ccaaaggttc tctaactaat gatcagttag 1800 aaaatggaag tgaatggaaa cccacttctt tttttctcct ctctccatct gaccaagaaa 1860

```
tgaatgaaga tttttcactc cattccagtt cttgtccagt aactaatgaa atcaaacccc
                                                                  1920
caagetgett gtttcagaca gagttttccc agggcatttt gttaagcagt tcacatcgac
                                                                  1980
                                                                  2040
tatttgaaga tcaaagattt gggtcatctt tgtttaagat gtcctcagag atgcacagtc
                                                                  2100
ttcataacca cettcagtet eettggteta etteetttgt geetgaaaag aggaataaaa
                                                                  2160
atgtgaatca atcaacaaaa aaaaaaatcc agagcagcct ttccagtgcc agcccatcaa
                                                                  2220
aaqcaactaa aaqttqattc attagaaagg tgtcatttgt ggttttgtcc tgagagaaat
                                                                  2280
agaaaagttg ttaaagttac cttttttcct cataaaagtt ctatacaaat tggaattgat
aatotttagt caagtatcaa gtcaggatgg tggattaacc ctgtacccag aatacttatt
                                                                  2340
gttcattttg aaaagacttt gttcttttca tttttatttg ggagtctttg tgaccagaga
                                                                  2400
2460
gttttgtttt tttactgaat ttgatatgta tctcggttgg atatacattg ttttttaaa
                                                                  2520
                                                                  2580
aaatgttatt taactgttag atacagtggc ctgttgataa gcctcacttg tcttcagaac
ttgggatttc ttaaataaaa cttttaggtg ttgtctatac actgctcaat aagacacttg
                                                                  2640
agtttaaget ttteecaggg tgggaaatta ttttaeetgt eeetttttat ttatgtttag
                                                                  2700
tgatggccta gtttttctgc agggccatga tggagaaata gcactctagc cttagtccaa
                                                                  2760
tattgattta ctttcttttt ttaggtttta tgtatatgtt tgcatttttt agcattgtgt
                                                                  2820
tttgtccagt tttgtgaaaa tgttctgcta gtatgaaaga aaacattttc tatatgaaga
                                                                  2880
catttgtttt atgttaggta gcttacattt tctcctctgc gtgtgtgtgt atgtgtgtaa
                                                                  2940
aatcagaaat ttagcatact atggaaagaa ggcatggagc acttgggttt agaggaacct
                                                                  3000
aaaacatcat agcttcattg ttccagatgt aacaggtttg aaagagctca tcgccaagtt
                                                                  3060
cttgatccac ttgcattcca ggggagtttt cttttgagta gtatgtttct tgtttgcatg
                                                                  3120
ttcctgttct ttgtggaaac tatgcatggt agcatttttg cttgctgtgt tttccatact
                                                                  3180
taagaaaaag aggtttcagt tggctgatag aatatctttt atgtaggaca aaacttttct
                                                                  3240
ggtcgacgcg gccgcggtcg acgcggccgc g
                                                                  3271
```

```
<210> 5256
<211> 8519
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8)...(3853)
<223> similar to gi3763972 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5256
tttcgtagac gagaggaaag taaaccgcat tcagcaagta accaccaatg gggagatcta
                                                                       60
catcateget ggtgccccca etgactgtga etgcaaaatt gatccaaact gtgactgttt
                                                                      120
ttcaggtgat ggtggctatg ccaaagatgc aaagatgaaa gccccttcct ccttagcagt
                                                                      180
gtcgcctgat ggaaccctct atgtggcaga cctcggaaat gttcgaattc gtaccatcag
                                                                      240
caggaaccaa gcccacctga atgacatgaa catttatgag attgcttcac ccgctgatca
                                                                      300
ggaactgtac cagttcactg taaatggaac ccacctacac accctgaact tgataacaag
                                                                      360
ggactatgtt tataacttca cctacaattc tgaaggtgac ttgggcgcga ttaccaqcag
                                                                      420
caatggcaat tcagtgcaca ttcgccgtga tgcaggcgga atgccgctat ggcttgtggt
                                                                      480
gcctggcgga caagtatact ggctgactat aagcagcaat ggagtcctga aaagagtgtc
                                                                      540
agcccaaggc tataatctgg ccttaatgac ctatccagga aacacagggc ttctggctac
                                                                      600
caaaagtaac gaaaatggat ggacaaccgt ttatgagtat gaccccgagg gacacctgac
                                                                      660
caatgcaacg tttcccactg gagaggtcag cagcttccac agtgacctgg agaagctgac
                                                                      720
aaaagtggag ctagatactt ccaaccgtga aaatgtcctc atgtcaacca acttgacggc
                                                                      780
```

```
aactagtacc atatatattt taaaacaaga aaatactcaa agtacctatc gggtgaatcc
                                                                      840
agatggttcc ctgcgtgtca cttttgccag cgggatggag atcggcctca gctcagagcc
                                                                      900
ccacatcctg gcaggggcag tcaaccctac cctgggcaaa tgcaacatct cattgcccgg
                                                                      960
                                                                     1020
agagcacaat gcaaacctca tcgagtggcg gcagaggaag gagcaaaaca aaggcaatgt
                                                                     1080
tteggetttt gaaaggagge tgagggeeca caacagaaac etacteteca tagattttga
tcatataacc cgcacaggaa agatctatga tgaccatcga aaattcaccc ttcgaattct
                                                                     1140
ttatgaccag actgggcgac ccattctgtg gtctcctgta agcagatata atgaagtgaa
                                                                     1200
catcacatat tcaccttcgg gattggtgac gtttattcaa agaggaacgt ggaatgaaaa
                                                                     1260
aatggaatat gaccagagtg ggaaaattat ttcaagaact tgggctgatg ggaaaatttg
                                                                     1320
gagctatacc tacttagaaa aatctgtgat gcttctccta cacagccagc ggcgttacat
                                                                     1380
ctttgagtat gaccaaccag attgtctgct ctcagtcacc atgcctagca tggtgcgtca
                                                                     1440
cagettacaa accatgettt cagtgggeta etaceggaac atetacacec caceggacag
                                                                     1500
tagcacttct tttatccaag actatagtcg agatggccga ttgctacaga ccctgcatct
                                                                     1560
ggggacaggg cgcagagtct tatacaagta caccaagcaa gcaaggcttt ctgaggttct
                                                                     1620
ctatgatacc actcaggtca cattaacata tgaagagtct tctggagtga ttaagacaat
                                                                     1680
acacctgatg catgacggat tcatctgcac aatcagatac aggcaaacag gacctcttat
                                                                     1740
tggacgccag attttcagat tcagtgaaga aggccttgtg aatgcacggt tcgactacag
                                                                     1800
                                                                     1860
ctacaacaat ttccgagtca caagcatgca agctgtaatc aatgaaaccc ctttgcctat
agatetttae egatatgttg atgtetetgg cagaacagag cagtttggaa aatteaqtgt
                                                                     1920
aattaattac gatttaaatc aggtcataac tactacagtg atgaaacaca ccaaaatctt
                                                                     1980
cagtgccaat ggacaagtca ttgaagtcca atatgaaatc ctaaaggcaa ttgcctactg
                                                                     2040
gatgaccatt caatatgata atgtgggccg catggtaata tgtgacataa gggtaggagt
                                                                     2100
agatgccaat ataacaaggt acttctatga atacgatgct gatgggcaac ttcagactgt
                                                                     2160
ttctgtaaat gacaaaaccc agtggcgtta tagttacgat ctgaatggaa acatcaacct
                                                                     2220
cttaagccat gggaagagtg ctcgtcttac tcctctccga tatgacctcc gagaccgcat
                                                                     2280
caccagatta ggagaaattc agtataaaat ggatgaagat ggctttctga ggcagagggg
                                                                     2340
aaatgatatt tttgaatata attctaatgg cctgctgcag aaagcctaca ataaggcttc
                                                                     2400
tggctggact gtgcagtatt actatgatgg gcttgggcga cgtgtcgcga gtaagtccag
                                                                     2460
cctagggcag caccttcagt tcttttatgc agaccttacc aaccccataa gagttactca
                                                                     2520
tttgtacaac cacacaaget eggagattac atctetgtat tatgatetec aaggteacet
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                                                                     2640
eccactaget gtgttcagea geegaggtca ggtcataaag gagatactat acacacetta
                                                                     2700
tggcgatatc tatcatgaca cttaccctga ctttcaggtc attattggtt ttcatggagg
                                                                     2760
actictatgat tteettacta aattagtgea eetggggeaa agggattatg atgttgttge
                                                                     2820
tggcagatgg acaacgccta atcatcacat atggaaacag ttgaacctcc ttcctaaacc
                                                                     2880
atteaacete tacteetttg aaaataacta eecagttgge aaaatteaag atgttgeaaa
                                                                     2940
gtataccaca gacatcagaa gttggttgga gctatttggt ttccaattac acaatgtact
                                                                     3000
acctggattt cccaaacctg aattagaaaa tttagaatta acttacgagc ttctacggct
                                                                     3060
tcagacaaaa actcaagagt gggatcctgg aaagactatc ctgggcattc aqtqtgaact
                                                                     3120
ccagaaacag ctcaggaatt tcatttcctt ggaccaacta cctatgactc cccgatacaa
                                                                     3180
tgatggacgg tgccttgaag gagggaagca accaaggttt gctgctgtcc cttctgtttt
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                                                                     3300
agccaatgaa gātagcaggc ggcttgctgc cattctcaat aatgcccatt acctggaaaa
                                                                     3360
cctacatttt accatagagg ggagggacac tcactacttc attaagcttg ggtctctgga
                                                                     3420
ggaagacctg gtgctcatcg gtaacactgg ggggaggcgg attctggaga atggtgtcaa
                                                                     3480
tgtcactgtg tcccagatga cttctgtgtt gaatgggagg actagacggt ttgcagatat
                                                                     3540
teageteeag catggageee tgtgetteaa cateeggtat gggacaactg tegaagagga
                                                                     3600
aaagaatcac gtgttggaga ttgccagaca gcgcgcagtg gcccaggcct ggactaagga
                                                                     3660
acaaagaagg ctgcaagagg gggaagaggg gattagggca tggacagaag gggaaaagca
                                                                     3720
gcagcttttg agcactgggc gggtacaagg ttacgatggg tattttgttt tgtctgttga
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gcagtattta gaactttctg acagtgccaa taatattcac tttatgagac agagcgaaat
                                                                     3840
aggicaggagg taacaaaaat atctctgcct ttgcgtcacc aaagactgcc tgtttttaaa
                                                                     3900
acataaaatg gtttattgta ttggttttct agatcagaac tctgtatatg taaatatgga
                                                                     3960
ggaaaaacat atccaactgc ctttcaatgt gacggaagat ggtattttaa tattgtttgt
                                                                     4020
ttaaactett taagaaatga cagagatttt tagttettgt gtggcagtat tcaaaataac
                                                                     4080
acaaggtaga actcaaacag ctaaaaacag ttttcagaaa gcaccacttt caatttgccg
                                                                     4140
agccatgcat atgttccaat atccagaaag aacccaaggt tctctatctc tattgtgaga
                                                                     4200
```

```
4260
agcagtttca teettaactg ttggcagaac ttacgggcta tttgaatagg tggtgcaata
gtatctgaaa cttgcctttc gaaagactgc cagccctttg acgttttcca gatctgttat
                                                                    4320
aggaaactta aaaacaggtg taaaatgtct tcagccacca tctcctagag tgaggaccca
                                                                    4380
                                                                    4440
attgcccttc cttcttgatt attcctcctt gcttgttaaa gtaaatgcca tattgttgtg
ctgtgttttg gcgtgtggtg gctgggttct gtctaccatg cttccctgtg ggtgtggtaa
                                                                    4500
ccagactgta tagccgctat ttgctcgtgt gtacatgata ccaaagcagc tggccagcgt
                                                                    4560
gacctetete acacgacetg ttttgactea attttttact aaaagttgtt cagetgtatt
                                                                    4620
ggtatcatgt aaacatagct tttattaacc tgggtaggaa tttctcattt atatatagga
                                                                    4680
tgtgttttgg tcatagtttc acattagtga ttcagtatct atacactgac ccaatggttt
                                                                    4740
tgtgcacatg aacggtaatt tacttaaaag tatgattctg gtacaaaaac aaacaaaggc
                                                                    4800
tttagcaggc atacgtgtct gggatgccga tacatacatt aactactact gcagaaattc
                                                                    4860
ataagagcca aaaccttaaa aaaatagacc tgggtactta agtgaaagta ctaaagggaa
                                                                    4920
                                                                    4980
gaccagacca aacatcacag cagttgctgc ccacattgtt tcagcccact taggatttat
ctttccaaat gttacaattc tgtattggaa catctcccag ccatcttcag ggaaatcgga
                                                                    5040
tecagtaaat cetttecaac egaaaacatt teaactaact atagagagge agacteattt
                                                                    5100
ttactaaaat aatttataca gttagttatt ttcgttctcc gtacttaccc atttatcttt
                                                                    5160
atttaategt ctctactgcc taggaaaata actattttcc aggacgggtt atttgttctg
                                                                    5220
cgatcattta aaatttggag aaaggtcagg attagtgtta atatcagctg cagtttctca
                                                                    5280
atctctagga atcctgcagt aaaacaagcc ccttggtgag ctggaagatt tgtgcccagt
                                                                    5340
gacaaagaga tagtttgtaa aatgctgtgt aattgtaagt taccacaaat gaaaatacat
                                                                    5400
gacagcacaa tgtggcccgt agaaaattcc cctgagccag cttctgcact ttcatcaccg
                                                                    5460
aatctgaaca tttgctatgt ctgaaggcaa atttatgatg gaatgttagt ttggattctt
                                                                    5520
tecagatget acctaaatge agtgtggggt cattgeettg etttgegatg acagtttett
                                                                    5580
                                                                    5640
tgaaaatatg caaagtcata agctcatgtt aaggtttttc aagagtctgc ctcctactac
acaaaggaaa gcaagggaaa ggaaatgacc ctggcaaaca gtagggaagg gtgtattcaa
                                                                    5700
acatttcatt ttcaaaacct tegggttaga ataccactta cacatgtatt etgagagaca
                                                                    5760
gaatteatga ggaacteate tetetttata aetggaaaea eaccagettg atatattget
                                                                    5820
aatccatact aaaatcatat tattgggttt tttctgaatc aggcctgtat taatggtaca
                                                                    5880
gtatttattc agaatggaat tctaaaatta ctaacaaact tgttgaaaat ttgaatacct
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ccacaccaac ctaaaaatgg accttaagtt cctagaacct ctgatgttct tttaaattaa
                                                                    6000
tggaaaaata atttgtgaac tgtatataga gagtgcattc ataaatgtga ttatgtattt
                                                                    6060
tatcacaaat ccaaaatgtc aatattagag tctattttgc ttatatttta agcaattata
                                                                    6120
cgtttttgca attcattgat gatgtatcat tttcaaactg ctttaaatat ccattagaaa
                                                                    6180
caaatatttg aagettttae ttaatagtga ttaeettgaa etgtgeattt etagtttgta
                                                                    6240
atacgtattt ggttggttcg tgcctttagt ttgttaaagt tacatttgta ttatattcag
                                                                    6300
gaaatgcact ttttattact tacagctgtg gttttaatac tgccttgaac tattattatt
                                                                    6360
6420
tagtaaatcg aagagaaaca ttttggcatt tettaaaaag aagatggaga tattgagtat
                                                                    6480
atcacttcct attcagctga atagaaagaa tgccttcatt gacttgcagt tctgcagttt
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aaattattga aagaacaatt cgtttgcatt tcctgatgaa agtaaaagca tttttcagag
                                                                    6600
aaacatatga attteteata eecageagae agatggetga eactgeacag eeacacea
                                                                    6660
ttcgagtaag ttaaagtgag agcatagtag ttggactctc ctatgaagaa cattctgggc
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tggaggcagg gaatactcca tggttgtttc tttttcctac ttaagcccat tttgtttgtg
                                                                    6780
cttttctgtt ttgttttgtt ttcactcttg cactacagtc tagagatcca aatgaactga
                                                                    6840
aaagttcaaa gtttaacaca tttaaatatg tttactttta gttgtcattc taatcgttat
                                                                    6900
tgattagaag catgactect gaaggaaagg gaaataaate teaatteata etaaettgea
                                                                    6960
acaaaacact tttaccatat aaataagtat atgatttatt tttaacccaa aaaatgtata
                                                                    7020
aaataagtgt gtcctttact gtcaatttat cgagaagatc tataatatat agactacata
                                                                    7080
tatataatat atacaacata gccaaatgta tgaaaacttg acaatgtata atttggaatt
                                                                    7140
cacatgctac ctatgtagac aggtatgaaa ttaagttata attttcatga gacattttca
                                                                    7200
tcactgttga cacagtttca agcattccat catgttattt tgactctttt tcttttttt
                                                                    7260
ttetttaaaa atatatttt aactagacca ggeeccacta taatateact taagagagte
                                                                    7320
agggcaaagt ttttgcattt atgaagatgt gttcatgtaa gggtgattgt aatggagttc
                                                                    7380
attggtaata gaagcaaaag tacagtaacg aagtattgaa aagaaaattt tggagacatt
                                                                    7440
ggagcatatt atatatagct tgtggaaaga cataaggcta cagatggaat ggaacattcc
                                                                    7500
tgttttcttg aagaaattca catacacata gctgacctga ctagtacttc agctcttcca
                                                                    7560
cagcetteta taaaggttet ttettetgea aagaaaacaa aacaaaacaa aacaaaacaa
                                                                    7620
```

```
7680
aaaaaacaaa aaaagcgcaa aaaacaaaaa aacaaaaaaa agcaaagtaa aatttaaaaa
tacagaaaac aaacaacaaa aaagaattca accataaata gtgactatta ttttcagtgt
                                                                     7740
qtccttcatq tgaaaqctat taaggaccaa atatactact gttcataaga agaaattact
                                                                     7800
ttctaaacag taactgaaaa tacttagagt taaacttgct gtggattttg tcttggcagt
                                                                     7860
                                                                     7920
tgtcatctta cattatttgt caaaggaaat gtgtttggca gttaaaaatc tttccttaga
tttagtggtg gactttaacc tcttaaataa atgttagtat atcagattgt gtccttgaaa
                                                                     7980
aatattttac ttgtatgaat catgacaacg tctaaatctt tactattctt ctggcaaaag
                                                                     8040
catcagtaag aaagaaggcg aaaaagagaa gtatagcctt tatgtcagaa aaacattctt
                                                                     8100
tttagctgct tactttctca tgaaaagtaa agatgtttac agtgtatgcc ccaagttttc
                                                                     8160
cagtttcctg taataaccaa caggtaagag gttcctaatc catattgaaa attgtgttat
                                                                     8220
aatggtctga gcccatgttg cctaggaaac aataggttcc caaatttgta aatccctgcc
                                                                     8280
teteetgtge etgaaaagtg acetggatae tgtaacaggt teeatgttee tetggetgea
                                                                     8340
gttaaatggt cttttgcatt ttgctctggc tttcaggcca gaagcatgca tttttctaca
                                                                     8400
agagcatcac aacaacatgc tgtaaatatt taaagttaaa cattatgtgt tgatatttga
                                                                     8460
aagaaaagca ctttgaatat ttcattttta aaaaataaaa ttgccaatga aaaaaaaaa
                                                                     8519
```

```
<210> 5257
<211> 932
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (12)...(881)
<223> similar to gi495144 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5257
ggeggaatte ggacatgate eteteegeet etegagataa gaccateate atgtqqaaae
                                                                       60
tgaccaggga tgagaccaac tatggaattc cacagcgtgc tctgcggggt cactcccact
                                                                      120
ttgttagtga tgtggttatc tcctcagatg gccagtttgc cctctcaggc tcctgggatg
                                                                      180
gaaccetgeg cetetgggat etcacaacgg geaccaceae gaggegattt gtgggeeata
                                                                      240
ccaaggatgt gctgagtgtg gccttctcct ctgacaaccg gcagattgtc tctggatctc
                                                                      300
gagataaaac catcaagcta tggaataccc tgggtgtgtg caaatacact gtccaggatg
                                                                      360
agagecaete agagtgggtg tettgtgtee gettetegee caacageage aacectatea
                                                                      420
tegteteetg tggetgggae aagetggtea aggtatggaa eetggetaae tgeaagetga
                                                                      480
agaccaacca cattggccac acaggctate tgaacacggt gactgtetet ccagatggat
                                                                      540
ccctctgtgc ttctggaggc aaggatggcc aggccatgtt atgggatctc aacgaaggca
                                                                      600
aacacettta cacgetagat ggtggggaca teatcaacge cetgtgette agecetaace
                                                                      660
gctactggct gtgtgctgcc acaggcccca gcatcaagat ctgggattta gagggaaaga
                                                                      720
tcattgtaga tgaactgaag caagaagtta tcagtaccag cagcaaggca gaaccaccc
                                                                      780
agtgcacctc cetggcetgg tetgetgatg gccagactet gtttgctggc tacacggaca
                                                                      840
acctggtgcg agtgtggcag gtgaccattg gcacacgcta gaagtttatg gcagagcttt
                                                                      900
acaaataaaa aaaaaaactg gctaaaaaaa aa
                                                                      932
```

```
<211> 2536
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (23)...(978)
<223> similar to gi3372651 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

### <400> 5258 gaatteeegg gtegaetatt tegtetttga gggteatace teeaaagtta aetgeeteet 60 120 ccgctgctat aatgttaaga gccgagagtg tgtggagcag ttacagctgg aagaccgggt 180 cetetgeete cacagtagat ggegaateet etatgeggga etggeaaatg geactgtggt 240 caccttcaac ataaagaaca acaaacgact tgagatcttt gaatgccatg gccctcgggc 300 agtcagetgt ettgetacag etcaggaagg tgecegaaaa etgetggteg tggggtetta 360 tgactgcaca attagtgtac gcgatgcccg gaatggactg ctcctcagaa ctctggaggg 420 ccatagcaaa accattettt gcatgaaggt ggtgaatgat etegtgttea gtggeteeag 480 tgatcagtca gtccatgctc acaacattca cactggtgag ctcgtgcgga tctataaagg 540 tcacaatcat gcagtgactg tggtgaatat cctaggaaaa gtgatggtga ctgcttgcct 600 ggataaattt gttcgtgtct atgaattaca gtctcatgat cgattacaag tttatggagg 660 acacaaagac atgattatgt gtatgaccat ccataaaagc atgatttaca ctggctgtta 720 tgatggcagt attcaggccg tgaggcttaa tctgatgcag aattaccgct gttggtggca 780 tggttgetet etgatatttg gegttgtaga teatttaaaa caacaettge tgacegacea 840 cactaatece aaettecaga etetgaaatg tegetggaag aaetgegatg etttttteae 900 tgctaggaaa ggatccaaac aggatgctgc aggacatatt gaacgacatg ctgaagatga 960 cagcaaaatt gattcatgaa gttttttgcc tcccacgttg ggaagtcatt agttgaacta 1020 ttttcacatt ggccccccac acaggccact ctcttccctt tcttggtgaa gtaaggaagg 1080 agaaagtggt tactagccag gcatacccct agcataagtc tgggcagctc tatgggatga 1140 taaattacac ttttaagttc ttgctggagg ttttaaatag atttagacaa atgttaagga 1200 accatacttc totgggacag catggcatat agtgatatat gctatttgcg ttotccagat 1260 gtttattgaa gatacagatc ctaattggtt acccagtttg accctaatca tatgtatatt 1320 ttattgattt cagtttgcaa tttttaattt atgttcttat gatggtttaa acctatagtc 1380 aggettttaa gtacaagttt gtttaagtge cagaetttga ggateagttt taatttetee 1440 attigtaata getgggtatt taaactggaa geaaatagtt ttettetta acaattatgt 1500 gcagtgtgtg tcactgtttt cttgctttat agatagaget ggctttaagt gctaaaggac 1560 acagtagatt tttgacaaac agtggctgct ctgctgacta tcttttagga attcaggaag 1620 caaatcacat agtgacaagt ccttacagac accacttcta gtaaatctct gtaaatgtgg 1680 atagaaagct cagtgtgagg cagtgcgtag acctaacgtc tacctttaca tctgctgttg 1740 aacctgggca ctacctgtta cagatcctgt caggctgttg aactggaggt gtacctttat 1800 cttcctttct agtgtctgac cctgcaagcc taatgttggt ttgaaccctt ttggtttgtt 1860 cagitgecag cetecatete teccaetgta tggeegtgee tagacegatg geagecateg 1920 aatatteete tgggeteaeg gggtgtttte caccecetg cagcaactaa gatggtggg 1980 gagagggggt tagaataaag catctgaata cagttttcag gacctcaagc agacttccta 2040 gagacttgtt tetgagacag ttetttgeet teaetteeet getagetggg aaagaagagt 2100 ggagcagaga ctctgcctgg ccactgagaa cagccaaatt cacaaaccct cagtgggct 2160 ttgtttttgg attttctccg gactcatcag taaacctgta gaagtgtcgc tttccagcct 2220 tttgtttctg gatcctcaaa actcagaacg tggccgggcg tggtggctca cgcctgtaat 2280 cccagcactt tgggaggctg aggcaggcag atcacctgag gctaggagtt gcagaccagc 2340 ctggccaaca tggcaaaacc ccgtctctac taaaaataca aaaagccggg cgtggtgggc 2400 geetgtaate eeagetgete aggaggetga ggeaggagaa tegettgaae eegggaggea 2460 gagattgcag taagctgaga tcgtgccact gcactccagc ctggtgacag agtgagactc 2520 cgtctcaaaa aaaaaa 2536

```
<210> 5259
<211> 4201
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1394)
<223> similar to gi5911845 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5259
atgitacgae getacegeee tgacateace agtigecatg gtageacege egagagiaaa
ggaggggtgg tgctagacgt ttcgggcaga gctcggccgc tgcggaggac aaggaactct
                                                                      120
ccctctccca ctagtctgac ttcttccaaa atgagcggcc tggatggggg caacaagctc
                                                                      180
ectetegece aaaceggegg cetggetget ecegaceatg ceteaggaga teeggacega
                                                                      240
gaçcagtgcc aagggctccg tgaagaaacc gaggcgacac aggtgatggc gaacacaggt
                                                                      300
gggggcagcc tggagaccgt tgcggagggg ggtgcatccc aggatcctgt cgactgtggc
                                                                      360
eccgegetee gegteecagt tgeegggagt egeggeggtg cagegaceaa ageegggeag
                                                                      420
gaggatgete cacettetae gaaaggtetg gaageageet etgeegeega ggetgetgae
                                                                      480
agcagecaga aaaatggetg teagettgga gageceegtg geeetgetgg geagaagget
                                                                      540
ctagaagcct gtggcgcagg gggcttgggg tctcagatga taccggggaa gaaggccaag
                                                                      600
gaagtgacga ctaaaaaacg cgccatctcg gcagcagtgg aaaaggaggg agaagcaggg
                                                                      660
gcggcgatgg aggaaaagaa ggtagtgcag aaggaaaaaa aggtggcagg aggggtgaaa
                                                                      720
gaggagacac ggcccagggc cccgaagatc aataactgca tggactcact ggaggccatc
                                                                      780
gatcaagagt tgtcaaacgt aaatgcccag gctgacaggg ccttccttca gcttgagcgc
                                                                      840
aagtttggcc gcatgcgaag gctccacatg cagcgcagaa gtttcattat ccagaatatc
                                                                      900
ccaggtttct gggttactgc ctttcgaaac caccccagc tgtcacctat gatcagtggc
                                                                      960
caagatgaag acatgctgag gtacatgatc aatttggagg tggaggagct taaacacccc
                                                                     1020
agagcagget geaaatteaa gtteatettt eagggeaace eetaetteeg aaatgagggg
                                                                     1080
cttgtcaagg aatatgaacg cagatcetet ggeegggtgg tgtetettte caetecaate
                                                                     1140
egetggeace gaggeeaaga ecceeagget catateeaca gaaaceggga agggaacact
                                                                     1200
atccctagtt tcttcaactg gttttcagac cacagccttc tagaattcga cagaattgca
                                                                     1260
gagattatca aaggagaact gtggcccaat cccctacaat actacctgat gggtgaaggg
                                                                     1320
ccccgtagag gaattcgagg cccaccaagg cagccagtgg agagcgccag atccttcagg
                                                                     1380
ttccagtctg gctaatctct gtcctgtgag aagcttctgc acaagtttcc ttaccacctc
                                                                     1440
ctcttggacc tatgcttggc caacagcatg cagtetteca tetgetttet etteatactg
                                                                     1500
tggattatet ttteetttgg ttetaaatet teagtaateg gttgeaagat tgttggetta
                                                                     1560
cctgcctgtg ccattettee tetgggeett catgetttte tgcattgtgt taacatgttt
                                                                     1620
caagtgcatg gccttctacg gcttctatgc caagcgtatg atactataga tatagtgtac
                                                                     1680
catactgeet ttetttgeat ggettggaee etatetgtga ceatgetett eteceaattt
                                                                     1740
aagtggttct gtaccacaaa gaatcttgat acattttcac aaataactga ttgggcttca
                                                                     1800
tactttatge tggetgtgte etgataceca tgtacttatg gtaagetatt tgggtattae
                                                                     1860
cactgcaaga caaaactgat atcttaaccc ggccatcaac ccaaattgga cattccagac
                                                                     1920
taccaccaac tggatcccag ctgccttcct gggcttgtgc catccaccct actggttatc
                                                                     1980
tgatagaaca agctggtggc tgatgggtga ctgctaggcg tgactgaggt aatagatgaa
                                                                     2040
aagtgtteta tgttateaca ttggttttee tgtacetttg gttactetae gteatggace
                                                                     2100
agetgetggt gagtatgaag cetgtgetat ageceaecce tacteaetet cacettetgg
                                                                     2160
ttgaactttg cttaggccac cattgtctgc ctcatcagga actatctgta gacgtagctc
                                                                     2220
```

```
ccagggagct cacagcaaca ccccctaccc ccaggatggg cagtaatatg tgacagagcc
                                                                     2280
caaagcaagg ctgggaacgc agtcccttcc agcttagtct ttctgactcc tagccaacaa
                                                                     2340
accatectta atgtgageaa ettetttagg cattteetet ttteecegee tgeacceaet
                                                                     2400
ctgaacatga caaaagttgc cagagttggg gcattgagga agagatattt ctggaatgtg
                                                                     2460
agacttgtta tgcctctgtc tctttctctc cctcctcctc ccctctccct cccctctcc
                                                                     2520
ctcccatccc ttttcttccc tttcactctg aagcagtttt agcttattaa cagaaaacaa
                                                                     2580
aactggcaaa gcaggctttt tgtttaattt gctctttccc tgattgtgtt cagagagaaa
                                                                     2640
ggttatgatt aaatgggctc cagatetett attgeeetta tteeteeace ecaettettt
                                                                     2700
tagcaaggtc tgaaagtttc aaagggagac ctataggtta attgtttagt tataggcagt
                                                                     2760
                                                                     2820
gttaaattag gcagattttg acatatttat ctttttaccc catccattct accaaaacct
gtgtatttct tgagttttta gtttgagaag ctggaaagag agagaagggc ctcacagtga
                                                                     2880
tgggttcagg acgggtcaaa ggcaaaggcc tttgtgatgt gagcaaaggc aaccaaaact
                                                                     2940
tagcctcact ccacttttct aaagatggaa attctttttt gggccttgga ctgcttctag
                                                                     3000
ggtagcattt tgtaggtcac tcttctcctt tgtactattt tgtttctgcc ctgatgtccc
                                                                     3060
ttgggtetee atectactge etggetttet tggeeeteat tteteagett etgeatttee
                                                                     3120
                                                                     3180
ttccctgctc ctaacaaatg aagaagcagg ctgcagcctg cattgtggaa gatctccagc
ctccttgtag gggataaggg gatgtgcagc atctgtgtgg attttcacgg acaagttcca
                                                                     3240
gtaggtggga cagtgatgcc gtcaaggctt agttatgatc atgtgtggtg ataaagacca
                                                                     3300
                                                                     3360
tecaccatea ccettttece etttggtttt gaaggeettg ccetaageta cetgagggtt
taggaggtet gaacacacac agtggagagg ttaatetagg ttgggaaact gagtaaaagt
                                                                     3420
ccagagcagg aatgagcctg ctgtggcgtg ggtttggaaa ggctcacagg aaagaacctg
                                                                     3480
caggatcagg ggtgggaggg gaggcccctg aggtgctctc cagggaagag gggctggggt
                                                                     3540
ttaaatagca tgcttggagg aagattttcc ttcaattttt cctaagtcct tgaattcacc
                                                                     3600
agtagatttt tgtaaacaaa atgtaagtcg atgttttctc tcaattatcc taggagtgac
                                                                     3660
                                                                     3720
ctttatatgt gtggaagatt aatggtatat gctccttatg tcactgtttt tgagtaaaat
ccattteett tetetgttte agectatgae aaaattgatg tttacaggee tgetttttge
                                                                     3780
ttataattga caacatgtgc aaaaatacca aatttgtgtc ctgtgcagta tgaagaattc
                                                                     3840
agtgaatatt cattaatgta ttagcttgtt ttgctctctg ttcatatatg gctctattct
                                                                     3900
tagaaatata atttgaatgt gatctttcaa tagtctgaat attttacaaa ttatagctat
                                                                     3960
gtcttgtgaa aataacctca aaaagaaaaa tacgactctg ttgtcttact tgatatttct
                                                                     4020
tgccctagta atgtacttga catttatgtt cctaagcagt gtaagtacta gtagaatttc
                                                                     4080
tetgteaaac teaatgatea tttagtaett ttgtettete ecatgtgett gaaggaaaaa
                                                                     4140
taaagtgtca ctaccgtatt tcttgttttc atcaaaaaat aaaaataatt taaaaaaaaa
                                                                     4200
                                                                     4201
```

```
<210> 5260
<211> 1385
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (217)...(486)
<223> similar to gi643 in the genepept database release 114,
    Run with FASTXY 3 3t00, default parameters
```

```
<400> 5260
aattaataca ttttgtgctt ttattcagct catcttgtgg taaaaggagt ttgctcaggc 60
aatgaattat gtcagattag gaataggtct tgaccgatct acagatatgc agtattgatg 120
gaaaaaggat ccctacttag aatagtttct ctggagtgag tataactgcc tttattaaaa 180
```

```
tgtttctatc tcttgtaaca atttcataat tgtatagttt ataggcaagc aataaacagc
                                                                      240
aagatgtttg aggtggatat gaaaattgct gaaatgcatg taaaaagaaa gcaactccat
                                                                      300
caactactac ctaatcatgt gcttcagaaa aagaaaaagc attcaacaga aggtgtcaaa
                                                                      360
ttgacagete teaatgacag cageetegae ttgtetatgg acagggataa cageatgtet
                                                                      420
gtgccttcac ctactagggc tacgaagacc agtccattga acagttctgg cagetctcag
                                                                      480
gggtaaggaa aaagagggaa atagaagtgg aggggctgtt tgctaaatca atcagataca
                                                                      540
ttctcttttt gctattaaag tcatctattt agaatgttat tttcattcca tctactaatt
                                                                      600
tttttttaaa tagcaattta attcccaggt ttggggatag tactttttgg ttttgtcttg
                                                                      660
tcatacttaa cattttattt ttgagactga taatgtcttc agtcagatgt gaatgaatgt
                                                                      720
tagcacataa cccctccaaa ttcatgtatt tagatagcta ctgctacagt gcactgtatg
                                                                      780
gtgtgctgat gagaacagac aaaaggaaca aaaccacctt tctgtcccag agctqcttat
                                                                      840
acctttgtaa cagggaatgt gtctatgata gttagggaaa cctgttttag aagagctaga
                                                                      900
tatctgtcta acatttacag cagttaaaat tttaaaaaatt tattattatt ttgagaaatg
                                                                      960
gggtctggct gtgttgttta ggctggcctt gagttcctgg atttaagcga tcctcctact
                                                                     1020
teageettet gagtggetga gaetaeagge geatgeeact geeetgggta tgaageagtg
                                                                     1080
aaaaattttc agccaggtgc agtgactcac acctgtaatc ccagcacttg gggaggctga
                                                                     1140
ggtggtagga teaettgagg ecaggagtte aagaceggee tgggeaaegt ggtgagaete
                                                                     1200
ccatctctag aaaaaagtaa aagaattagg tgtggtggta tgcacctgta gtcgtggcca
                                                                     1260
ctcaggaggc tgaggtggga ggattgcttg aacctgcaag gttgagacta cagtgagctg
                                                                     1320
tgatcccact gctgttgccc ccagcctggg caaccagagt gagaccctgt cttaaaaaaa
                                                                     1380
                                                                     1385
```

```
<210> 5261
<211> 455
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)...(58)
<223> similar to gi2224405 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5261
60
ttaattgete agaetgtget agagaataeg taccatgaaa tacatatatt teataaggtt
                                                              120
cagttacaaa atggattgtt tcaaatggca atttcttaca ctaacctgat tatgaaaaaa
                                                              180
agaagtetgt atcatetget tecaagtetg ttatgteeaa atatattita attatgeatt
                                                              240
tattttgcta cttttataaa tattagagat ttcaccttaa attatttttg taactagttc
                                                              300
tagaacatgt tttccaatta ttatttttct aatggagaca tataattgac ctatgtttat
                                                              360
gcatatatgt tctctacaca gtgaaacttt ttttaaaaaag aatagtaaag aaaatgcgga
                                                              420
agctctggct ctccaaggca aagtcaaaaa aaaaa
                                                              455
```

```
<210> 5262
<211> 399
<212> DNA
```

# <213> Homo sapiens

<220>

<221> misc feature

<222> (208)...(283)

<223> similar to gi2204218 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

# <400> 5262 tttgtgctgc aaccaggtac tgtgatttct cacctagttt ccatagctct tgtgaaggtg 60 ttttcgtgca tggatagtgt tcaaattgat gtttctgtta ggggacaatc actggagagt 120 cctattcttc catcttattc tgcccctctc ctccaaaaag gtcaacttgt aactgctttt 180 ttcaaaccaa tattcaatca gtttatgaac cacatgagtc agaatcatca gaatatccca 240 ccaacaaata cagagagaag atcaagatcc tgtacaatac tataaatata tatttatgtt 300 ttcacagtca cccagtgtat tgtaatgtat acttgaaaaa tgttataact tatgaaggac 360 agtttctgat gagagtcttt ataagatata agacttaat 399

<210> 5263

<211> 2255

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1881)...(1012)

<223> similar to gi5912357 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5263
tttttttttt ttactttcat taagtgctca tttattattt atgtagaaaa gtttaaaatg
ctcccaatga gttcatcagt tatcaagctc acatgagtta ggacacaatc acctttggtt
                                                                      120
tttcatctca taataagtca gcaaaagttg acatttatct tactagacat ttcccattag
                                                                      180
ccctaactga aacagatatc aaacacccta gattctcttc agtgcaaagt atctggagtc
                                                                      240
acagcaattt tagagacaag ctagtgcaat ctagtaattt tcatagtcgc agaaactgag
                                                                      300
gcctagaagt gatttgtaca tgtgagcagc tagaaccagg acaagaactc cagaacctgg
                                                                      360
gaccacgtga gagtaaaaag aaagggcacc gagtacagga acaacaactg acacatttca
                                                                      420
ggtggaaaaa acaagtcaca taactgaaaa ccaaaatcac agttacataa ctattttata
                                                                      480
ttagetteet acatataaag tataaaaaet cagetataca tgttatgaaa ttgtacaaae
                                                                      540
ttacacttgt ttatggccta aaatttgtat aaggacacac ttatacagat ttcataaaca
                                                                      600
atggccattt ttagaaaaag ttatatttgt ccctgaacat aatattcata atttgctttc
                                                                      660
aaaacaaact cgaagtaagg attggacttt aagcttccaa gctgatccgc ttgtagcagg
                                                                      720
tettteacet eeggtaagta eteactgage tgaatgeeat ettttaaaag tttetgtaag
                                                                      780
atcttcacaa atatactgtc tttagatact tcaattggat catctttgcc atcaqaactq
                                                                     . 840
gaccagttat ctctctgaag agctttgcaa aggatttcca gttttagatc atttatattt
                                                                      900
atatettett eeteateaat atatteeaae aagteeaaag etttettgaa ateatattea
                                                                      960
ttagctcttc tattttcttc acagatatat agaccaatga gttgtggtgc agtcaatact
                                                                     1020
ggcatcgcac tgagatttag ctgtttctcc gccagcagct gttcaggtag ggtctcctga
                                                                     1080
```

```
1140
tgcagtagaa agegeteetg etcagecatt tetteaattt tttettgtag catateetet
                                                                     1200
gaaaagtctg aagctaatgc agccaattta ctcaagccaa gaagggtttt cttctttgca
                                                                     1260
aaqtaacqaq tttccatatt tgccaaaccc agaagtgttg catgagcctt ttctaattct
tggctattaa tttcatgtaa ccagctgaga tgttcatgag cttgcaaaaa atttgccaac
                                                                     1320
tgtccatgct gagaaatggg ctgagataat aatttgcctc gctttccttt ctccagatac
                                                                     1380
                                                                     1440
caacggaaga gaaagtctga aaaattctga tcagcaaact gggtcatgta gcgctggagt
cggctctggt tgtcagtctg ctcacacatt tgtaccaata tatcaaagtc acagtatttc
                                                                     1500
                                                                     1560
tetgetagag aageageeea caggtactgg cetagtgaaa gaagaggaga taagagatet
                                                                     1620
gatettttet gtaggtatte cateteeaga ttgteatate ttteeegatt aetggattta
                                                                     1680
tccacagact taagctgaga aacataacca tccaggaagc aatcgatcag ggctaccagc
tgctcggtca cgatgtttcg gaggttgctg tctgcctgtg gataagccac cttcaggaca
                                                                     1740
ateteatget ggegtattat tacegttegg atgecaceag gaccaettgt tgeegtecat
                                                                     1800
ggaacatatt caggttettt ttetagtgat tettetette tatacaaaga gtttetattt
                                                                     1860
tggcgataat gactagcagc ctgcagcata tcctggaaaa aaagttaatg tgttatcaca
                                                                     1920
tgcaaaaggt gatggatcac agtatttctg aagataattt aagacagcaa agtaaattag
                                                                     1980
taagaaaaaa tactcagggg ccaggaatgt tggctcacac ctgtaatccc agtgctttgg
                                                                     2040
gaggetgagg taggaggatt geteetagee tgacaacata gtgagaeeee atetgtacaa
                                                                     2100
aaaattttta aaattacctg ggcatcgtgg cgtgcaccta ccgtcccagc tacttgggag
                                                                     2160
actgaggcag gaggactgct tgagcccagg aggtggaggc tgcagtgagc tataatcaag
                                                                     2220
ccactataaa cacgaaatcg tcgacccggg aattc
                                                                     2255
```

```
<210> 5264
<211> 719
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (599)...(168)
<223> similar to gi1256001 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5264
tttttttttt ttccaaggac aagagtgtct ttactggagt tgggactggg gcctctatag
                                                                       60
gggcttctgg tttctgggct gtaggtttgt gaggtgtggg atcttaagtc aaaggtgggg
                                                                      120
gactagggca gggtatcaga aggtgatgtc atcctcgtac agggacagca gcagcaggac
                                                                      180
ggtccagccg cccagcaggc ccacgttgtg cagcaggaag aggagccagg gccgcgggtc
                                                                      240
cegtaettte aacategeeg ggageatgte geagagtget aegtagagga acaggeeggt
                                                                      300
ggccactgcc aggatccagg cctcgctctc ctcgctgact ccaaccgcga gtgccacgta
                                                                      360
gagaccagcg aaggccgtga gcgcggaggc caggttcagc agcagtgctt ggcgcacgga
                                                                      420
cageceegeg tgeageaagg eggegaagte ceeeageteg tgtggeaact egtggeagaa
                                                                      480
cacggccagc gaggtggcca gcccggtctt ccaggaggac gcgaaggcgg cgcccacggc
                                                                      540
cagecegteg gegaagttgt geaeggegte geecagagtg ateatatagg geagtageet
                                                                      600
caactetggg etcagtetee tgggetcagg gtteageage teegggetet eetcegeeae
                                                                      660
ctgggaggag ccttgagtaa gtcctcgaaa tcgtcgaccc gggagttccg gccgagtgc
                                                                      719
```

```
<210> 5265
<211> 1794
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (574)...(1015)
<223> similar to gi3157950 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5265
                                                                     60
gaggagetga ggtteggtee eegeegggga ggtegggaeg ggeagggget gaggaeeeeg
cgccagcttg ggagccctgg agttctggcg ggagggaagc tgtcaaatgg aagccggtag
                                                                    120
180
egeegeetet teettteeag eeteeegeee tegtetgett eeggeeetgt ggeetggtgg
                                                                    240
ggetetgeag geteectegg gagtggteet tgggeegtgg eeeetetggg aggeetgagg
                                                                    300
gageteaate etggtageaa cacceetgaa tteetggtgg tgaaaggatg tggceecagg
                                                                    360
acceateceg gaaggaggtg etgaggtttg cagteagetg cegtatectg actetgatge
                                                                    420
tgcaggccct cttcaatgcc atcatcccag atcaccatgc agaagccttc tctcctcctc
                                                                    480
gcctggcccc ctcaggcttt gtggaccaac tcgtggaagt attatgccta cacccaattc
                                                                    540
tgtctgccag gctcagcccg ccccattcct gagcctttgg tacagttagc tgtagacaag
                                                                    600
ggctaccgga ttgcagaggg aaatgaaccg ccttggtgct tctgggatgt tccactaata
                                                                    660
tacagetata tecaggatgt etactggaat gttggetttt tgaaataeta tgaqeteaag
                                                                    720
caggtgccca attttctact ggctgcacca gtggctatac tggttgcctg ggcaacttgg
                                                                    780
acatacgtga ccactcaccc ttggctctgc cttacacttg ggctgcaaag gagcaagaac
                                                                    840
aataagaccc tagagaagcc cgatcttgga ttcctcagtc ctcaggtgtt tgtgtacgtg
                                                                    900
gtccacgctg cagtgctgct gctgtttgga ggtctgtgca tgcatgttca ggttctcacc
                                                                    960
aggtttttgg getectecae teetattatg taetggttte eageteaett getteaggat
                                                                   1020
caagagccgc tgttgagatc cttaaagact gtgccttgga agcctcttgc agaggactcc
                                                                   1080
ccaccaggac aaaaggtccc cagaaatcct atcatgggac ttttgtatca ctggaaaacc
tgttctccag tcacacgata cattctagge tacttcctga cttactgget cctgggacta
                                                                   1200
ctcctacatt gcaacttcct gccttggaca tgacctggac tctccaggga caggttggaa
                                                                   1260
gccaacttaa cccaggggtc tgaaagtaaa aatacacatt ggaactgcct ctgctgccct
                                                                   1320
gggatcatta ctgtgtccat tataatcttt ctctttctct ttgaaagctg gtcaggaatg
                                                                   1380
ggagaagtgt cagacactag agageceett etggteetgg etagggeaaa ttttagacaa
                                                                   1440
ctattttctc tgtaagtgaa gattgtcgta ttccaagtct aaaatacacc tgqatctqtc
                                                                   1500
tagtcaatca acatagcaga gacagtcttt aaacctacca ttgacctgtg tgtaaattta
                                                                   1560
aatgttcatt ttattgaagt gtaaatttca tcataaggca ttagctgtta ggctggttat
                                                                   1620
cagtecacac aagtttgtat aggeetgaat tgtgtagtgg cagtaaaaaa gtgggaccat
                                                                   1680
ttttaccaaa tgcgacattg tttctgatgt ttttttttat gatttgtgca tgtattttta.
                                                                   1740
tatgaaaaaa acttacaaag atatgcaaat taaacttett teagttataa aaaa
                                                                   1794
```

```
<210> 5266
<211> 1499
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (311)...(910)
<223> similar to gi3881107 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

```
<400> 5266
gtttcgcgga cctatgtcgc acgtgttgga attcgccctc cggagtgcgc agggcgacgg
                                                                       60
ccccacctcc ggccactggg acggcggcgc ggagaaggca gactttaacg ccaaaaggaa
                                                                      120
                                                                      180
aaagaaagtg gcagagatac accaggctct gaacagtgat cccactgatg tggctgccct
                                                                      240
tagacgcatg gctatcagtg aaggagggct cctgactgat gagatcagac gaaaagtgtg
geccaagete etcaatgtea atgecaatga eccaeeteet atateaggga agaacetaeg
                                                                      300
                                                                      360
gcagatgagc aaggactacc aacaagtgtt gctggacgtc cggcggtcat tgcggcggtt
ccctcctggc atgccagagg aacagagaga agggctccag gaagaactga ttgacatcat
                                                                      420
cctcctcatc ttggagcgca accctcagct gcactactac cagggctacc atgacattga
                                                                      480
                                                                      540
ggacacattt ctgctggtgg taggcgagag gctggcaaca tccctggtag aaaaattatc
tacccaccac ctcagggatt ttatggatcc aacaatggac aacaccaagc atatattaaa
                                                                      600
ctatctgatg cccatcattg accaggtgaa tccagagete catgaettea tgcagagtge
                                                                      660
                                                                      720
tgaggtaggg accatctttg ccctcagctg gctcatcacc tggtttgggc atgtcctgtc
tgacttcagg cacgtcgtgc ggttatatga cttcttcctg gcctgccacc cactgatgcc
                                                                      780
gatttacttt gcagccgtga ttgtgttgta tcgcgagcag gaagtcctgg actgtgactg
                                                                      840
                                                                      900
tgacatggcc teggtecace acetgttgtc ceagatecet caggacttgc cetatgagac
                                                                      960
actgatcage agageaggag acctttttgt teagttteec ceateegaac ttgeteggga
                                                                     1020
ggccgctgcc caacagcaag ctgagaggac ggcagcctct actttcaaag actttgagct
ggcatcagec cagcagagge ctgatatggt getgeggeag eggttteggg gacttetgeg
                                                                     1080
                                                                     1140
gcctgaagat cgaacaaaag atgtcctgac caagccaagg accaaccgct ttgtgaaatt
ggcagtgatg gggctgacag tggcacttgg agcggctgca ctggctgtgg tgaaaagtgc
                                                                     1200
cctggaatgg gcccctaagt ttcagctgca gctgtttccc tgaaagccag agaagacctt
                                                                     1260
cetettacat cacattaagg cacccactca etacettgge gtegattttt gggtetgaet
                                                                     1320
tgactcgtca actgctggtc tctcccacct ggttggaaat gtcgttggaa acttgcaaag
                                                                     1380
actetecaga cettagggaa caagaggeat cacteagtee ttetgggaca getteeetgt
                                                                     1440
aagcaaagcc aggtttgttc tagattcact ctggccttga aaaaaaagtg ctttttgcg
                                                                     1499
```

```
<211> 820
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (718)...(444)
<223> similar to gi4538665 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 5267

```
<400> 5267
cgtcgacttt tttttttcc tggacagcat ttcattttat tatgtaactg tagaaagcct tgatcaagat aaaaataggg atgacttatc agaaactgaa gaattttctt aggaaagcaa 120
agtttactga aggatacctt cattccagcc atgatgaacg tctgtcttct caggcaatca tgatgaagct ccagggacag tataacccat ctctcccact catccctgag ccttggtcct 240
```

```
ggactgaatg tggttagagg ttgtggaaat aaaaaaaaga accaaaataa gaacactctc
                                                                      300
cataaaagcc aagctcagag actggtcctc ttttgcttag gtacaacagg agcaggaagg
                                                                      360
atcaacattc ttgaaagcat accttctatt catttggctt ttttgacttg gggcgccagt
                                                                      420
gtagagetga geactecaet gecetttete caeteacaaa tgtetgeata ggtacaegte
                                                                      480
eggeactice aagesteets caegicaast coetgggget eteggitgges catecagiag
                                                                      540
gccatataat gctgcacctt ggctctcacc tccttctctt tgaaggctac aatctcagta
                                                                      600
                                                                      660
cccaqcacaq tggcaqtctc ttggtggata tactcaatct tcaagatatc aataactggg
aggtetgaca gtgttagaga caagaagaca agttecatga ggteacecaa agaetteaca
                                                                      720
gagaageete eetgetggge atgeeteage actgatggee eeagtggett ttetagaeee
                                                                      780
aactttgtgt ggtggattag gctagcaggg gtcacttttc
                                                                      820
```

```
<210> 5268
<211> 1046
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (772)...(593)
<223> similar to gi1903220 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5268
tttttttttt tgattcgcta caatgagttt attggaaaca cagagtgaaa caaagacaaa
                                                                       60
ggagaaggca gcagagtcat tagtttttca gaagctcttg agggcagccc cggaagggag
                                                                      120
atgitetece cacaegegig ggeeigteee tegeagagie alagaaecae taleeagggi
                                                                      180
ccgcgtctcc attccacagg caaaagcaca tgggcagagt cccaggtcgt gcagacaggg
                                                                      240
acattcccgg gcctcccccg ttcctccaag ctttggggaa gagctcaggc aagaccaatg
                                                                      300
tatacagcaa aaaaaaaaca gaaggtaggc ggaagaaaaa gatgaatcct cgggacaaca
                                                                      360
aattgactac caggaaaagc tacagagaga gaccatggcg cctcccggcc ctccccggac
                                                                      420
tectgegtee ggggatgget eeeggagegg ageggtgggg agggegetta gagtgeagge
                                                                      480
agcgggcggc ggctactggg aggccggcgc gggcggcgcg ttctggtggc gcgaggtact
                                                                      540
ggctgggtgg agagtgacgg cgacaggcgc tggcggaggc ggcagcctcc tagcacctct
                                                                      600
tacagetgee geegeagaeg ecaaceeggg eggagggge geaggegtta gtagtgeeca
                                                                      660
ccaccacgtt gctgttgctg gggacgctac tgactctggt ggagacaaca ggggcagtag
                                                                      720
tggaggcgca gagatcgcca cagacaacgc caccgcggga gctgctgacg cctgcagggg
                                                                      780
aaagagacgg aggcgcgcgt caggcgcagc cgcgacctgg gtgagtggct ttgctgcgag
                                                                      840
cccacgegcc ctttgcccag aggctcccag acccgcccag cgggaggagg ggacggaccc
                                                                      900
cactacttac agacattcac cgagccgacg ccctcgcaca gcctgcaggg agagaaggcg
                                                                      960
agaggtcagt geogeggaaa aggegeeggg eeeeegtgae tgaagtggag ggggaeatet
                                                                     1020
gtggccctcc atctgggcac ttgcca
                                                                     1046
```

```
<210> 5269
<211> 1701
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (37)...(793)
<223> similar to gil067223 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5269
                                                                       60
geggeegegg gggeeeegee tgetgegege gegggetaeg eeeacttget gaaegtgeag
                                                                      120
qqccqqacqc tctatqacqt catcttgtac gggctccagg aacactcgga ggtgtctggc
tteettetgg agtgtgaeag eteggtgeag ggegegetge agaageacet egegetatae
                                                                      180
aggateegge ggaaggteae ggtggageeg caceeggage tgegagtgtg ggeggtgttg
                                                                      240
                                                                      300
cccagttccc ctgaggcctg cggggctgca tcgctgcagg agagggcagg ggctgccgcc
                                                                      360
atceteatee gegaceegeg aacageaege atggggtgge ggeteeteae ecaggatgaa.
                                                                      420
ggcccagccc tggtgcccgg gggccggctc ggggacttgt gggattatca ccagcaccga
tacctgcaag gcgttcctga gggggtccga gacttgcctc ctggggtggc cctgcccctg
                                                                      480
gagtccaacc tggccttcat gaacggcgtg agcttcacca aaggctgcta cattggccag
                                                                      540
gagetgaegg ecegeaceca ecacatggge gteateegea agegeetett ecetgteegg
                                                                      600
ttettggace ceetteecac cagtggcate acceetggtg ccaeggtget gaetgeetea
                                                                      660
ggacagactg tgggcaagtt cagggctggc cagggcaacg tggggctggc cctgctgtgg
                                                                      720
tcagagaaga tcaagggtcc tctgcacatc agagcctctg agggtgccca ggtggcctta
                                                                      780
geogeatetg tgecagaetg gtggeetaca gtetecaagt agteegaage ettggetgge
                                                                      840
                                                                      900
gcaggetgat ggggaggetg gggcetgggg cetttggeet etgteeaggg tetteeegte
                                                                      960
ccatctgtct gctgcgccta ctgggtggga gccctggttt ccatctggga aagtcccct
                                                                     1020
tgtaggtgcc ctgcctggcc ccacccatgc tcaggggccc caggcacgtg ggttgttttc
                                                                     1080
tecetggact teetgtggee ecagaggage ceaeegtgtg agtgetggge teeagatgge
geegggteee aategtgget ceacacaggg ttgtetggga ggaegggaeg gtgtetetgg
                                                                     1140
ccagcactgg cagcttccgg gccttgtacc cctctctgcc tggcatgagc ctcatggggg
                                                                     1200
                                                                     1260
gttggtccct gtgcctggaa gcggggtggt gtccagggtc tgcaggctgg ggctcgggct
ttgggagttg tttcactgtg cttgcttcca gcatgtctca gggtggggct atgcgtggtc
                                                                     1320
                                                                     1380
tagaggggte tggggeattg gateaggtgg catgtgggtg tetacacate gagaagcaca
                                                                     1440
cagggatgag ccactaggta teccatgetg gaggettgtg gaaggetgtg cccatetece
                                                                     1500
atgittcccc acctctgttc ctcctcagag ccctccagga gcgtggggtg ggggccagcg
cagggeteag gagecageag ggeagagtte tgeetgtgtg tgetgggttt tggeatagee
                                                                     1560
                                                                     1620
tgtgtttgca gtgagagtga ettgetgtca gtcaegggge acageeteet gtteaeceae
                                                                     1680
tggetteece etteecactg aagtgtgage tetatgttte agggeateta ttaaagagtg
                                                                     1701
agccacaggc aaaaaaaaa a
```

```
<210> 5270
<211> 712
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (75)...(481)
<223> similar to gi2760483 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5270
tttcgtaaaa acagagcggg agtattggga ggaggataag ctggggaaga ggctggccac
                                                                       60
actggttgct ataaccacca ccacttccgg tccgttcctc tttacggccc acctcagcgc
                                                                      120
tgcccgcgcg aaatttgtat ccctctgctt gtgtccactg gctcctgggg agcagcgcag
                                                                      180
ggaggaggag gaggaagata tcaaagagcc ctcccattgg gggccccaga tcgccacttc
                                                                      240
cggtgaccag aggtagggaa ggaaacaatc ccgacccgga gtggacaggt gaggagggga
                                                                      300
ggacttgcct cgccgaggcc gctgcgagga gcgtgcccaa gggcgaaggt ccagggaacc
                                                                      360
                                                                      420
eggeteeege geaeegaaga eggeegeeat geeggeeegt tgtgtggeeg eecaetgegg
caacaccacc aagtetggga agtegetgtt cegettteec aaggaceggg cegtgegget
                                                                      480
getetgggae egettegtge ggggetgeeg egeegaetgg taeggaggea atgacegete
                                                                      540
ggtcatctgc tctgaccact ttgccccagc ctgttttgac gtcttcttcg gttatccaga
                                                                      600
agaacctgcg cttctcccag cgcctgaggc tggtggcagg cgccgtgccc accctgcacc
                                                                      660
gggtgcccgc cccggcacct aagaggggag aggagggaga ccaagcaggc cg
                                                                      712
```

```
<210> 5271
<211> 733
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (733)...(330)
<223> similar to gi4704324 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5271
ttttttttt ttggtgaaac ataatgtttt taatttcaca cctcacagag cacagttgaa
                                                                       60
tgcttcataa cgacataaac aaaagttagg ctaagcactg cagacgagtt gggagggcaa
                                                                      120
agatagette ecetgtggte tgeacteeag gtttgegagg gaatatgtaa etaacaaact
                                                                      180
gcttggctaa ggccacagaa atgtgtttcc tggtgttttg gctgctgacg ccagtcttct
                                                                      240
ctgacaaaga tgtgttaaca ctgggtgcaa caaactgaat ctctttccta agatcagtca
                                                                      300
ggaaaattca tgtcttattt cttcctggat ttctttttgg tggtgtcata agcacggatg
                                                                      360
acttetteet gaetaacage teegtgttet tettgagaaa aageatacee atgegggaeg
                                                                      420
ecetgetgea gggagetgee deggaaeage gtegggggeg tetteeggee eageetettg
                                                                      480
atcaggeggt egegetegtt cageetettt ceattgetat eeegeageac egetttteee
                                                                      540
aggactegag acttggttte cageteetge aceteeteea geaatgtett tttgeaggtg
                                                                      600
tgettggetg etetécatge cacatettea ateaaacagg cagtaggaac cagaaataat
                                                                      660
eccaaccaga agtgtgegga geteaggace atagttgeet gteeteteat atetggagea
                                                                      720
atgggaatgg tgg
                                                                      733
```

```
<210> 5272
<211> 1336
<212> DNA
<213> Homo sapiens
```

```
<400> 5272
                                                                       60
acaagcotgt gagcaagcac aagcgggatg agttggtgag agccattgaa tcaccottgt
agaccetgaa ctateetgea gagaacaget teaateaceg teettacaeg gettgtgatt
                                                                      120
tcatagaagg gatctaccga acagaaaggg acaaagggac attgtatgag ctcaccttca
                                                                      180
                                                                      240
aaggggacca caaacatgaa ttcaaacggc tcatcttatt tcgaccattc ggccccatca
tgaaagtgaa aaatgaaaag ctcaacatgg ccaacacgct tatcaatgtt atcgtgcctc
                                                                      300
tagcaaaaag ggtggacaag ttccggcagt tcatgcagaa tttcagggag atgtgcattg
                                                                      360
agcaggatgg gagagtccat ctcactgttg tttactttgg gaaagaagaa ataaatgaag
                                                                      420
tcaaaggaat acttgaaaac acttccaaag ctgccaactt caggaacttt accttcatcc
                                                                      480
agetgaatgg agaattttet eggggaaagg gaettgatgt tggageeege ttetggaagg
                                                                      540
gaagcaacgt cettetett ttetgtgatg tggacateta etteacatet gaatteetea
                                                                      600
                                                                      660
atacgtgtag gctgaataca cagccaggga agaaggtatt ttatccagtt cttttcagtc
agtacaatcc tggcataata tacggccacc atgatgcagt ccctcccttg gaacagcagc
                                                                      720
tggtcataaa gaaggaaact ggattttgga gagactttgg atttgggatg acgtgtcagt
                                                                      780
atcgqtcaqa cttcatcaat atagqtggqt ttgatctgga catcaaaggc tggggcggag
                                                                      840
                                                                      900
aggatgtgca cctttatcgc aagtatctcc acagcaacct catagtggta cggacgcctg
                                                                      960
tgegäggaet ettecacete tggeatgaga ägegetgeat ggaegagetg acceeegage
agtacaagat gtgcatgcag tccaaggcca tgaacgaggc atcccacggc cagctgggca
                                                                     1020
tgctggtgtt caggcacgag atagaggctc accttcgcaa acagaaacag aagacaagta
                                                                     1080
gcaaaaaaac atgaacteec agagaaggat tgtgggagac actttttett teettttgca
                                                                     1140
attactgaaa gtggctgcaa cagagaaaag acttccataa aggacgacaa aagaattgga
                                                                     1200
```

ctgatgggtc agagatgaga aagcctccga tttctctctg ttgggctttt tacaacagaa

atcaaaatct ccgctttgcc tgcaaaagta acccagttgc accctgtgaa gtgtctgaca

1260

1320 1336

<223> similar to gi4589624 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

<220>

aaggcagaat gcttgt

<221> misc\_feature <222> (117)...(1030)

```
<210> 5273
<211> 1045
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(955)
<223> similar to gi1420005 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5273
aatttctgcc atttgaagga aaagtgaatt taaagaaacc gcaacatgta ttttctgttt 60
tggaggatta tggtttagac ccaaactgca tccctgagaa tccacataat atttattttg 120
gtagatggat tgcagatgga cagagagagc ttattgagtc atacagtgtc aaaaagagac 180
```

```
240
actttattgg aaatacaagt atggatgctg gtttgtcatt cattatggct aaccatggaa
                                                                      300
aagtgaaaga aaatgatatt gtctttgatc catttgttgg aacaggtggc ctgctgatag
catgtgctca ttttggtgca tatgtgtatg ggacagacat agactacaac acagttcatg
                                                                      360
gcttgggaaa ggctactagg aaaaaccaga agtggagagg accagatgaa aacattaggg
                                                                      420
ccaatcttcg tcaatatggt ttagagaagt attaccttga tgtcctggtt tcagatgcat
                                                                      480
ctaaaccttc ctggaggaag ggcacatatt ttgatgcaat cattactgat cctccatatg
                                                                      540
gtatcagaga atctacaaga agaacaggtt cacagaagga gataccaaag gggatagaaa
                                                                      600
                                                                      660
aatgggaaaa atgtccagaa agccatgttc ctgtttcctt gagttatcat ctgagtgata
                                                                      720
tgtttcttga cctgttaaac ttcgcagctg agaccctcgt tttaggtgga agactagtct
attggttacc ggtgtatacg ccagaataca ctgaagagat ggtgccttgg cacccttgcc
                                                                      780
tggaactcgt tagcaactgc gagcagaagc tttccagtca cacatcaagg cgcttgatca
                                                                      840
caatggaaaa ggtgaagaaa tttgagaatc gggaccagta ttcacatctg ctaagtgatc
                                                                      900
attttctgcc ataccaaggt cataattcct tccgtgagaa atattttagt ggggtaacaa
                                                                      960
aaagaattgc caaggaagaa aaatccaccc aggaatgaaa attaagattt tgtcattgat
                                                                     1020
gaaagaataa gaatttgatt taaaa
                                                                     1045
```

```
<210> 5274
<211> 1188
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (23)...(581)
<223> similar to gi4469173 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5274
attecegggt egacgattte gteacaatge eegeegggge ttettettet eecatattgg
                                                                       60
gtggctgttt gttcgcaagc atcgagatgt tattgagaag gggagaaagc ttgacgtcac
                                                                      120
tgacctgctt gctgatcctg tggtccggat ccagagaaag tactataaga tctccgtggt
                                                                      180
geteatgtge tttgtggtee ceaegetggt geeetggtae atetggggag agagtetgtg
                                                                      240
gaatteetae ttettggeet etatteteeg etataceate teaeteaaea teagetgget
                                                                      300
ggtcaacagc gccgcccaca tgtatggaaa ccggccctat gacaagcaca tcagccctcg
                                                                      360
gcagaaccca ctcgtcgctc tgggtgccat tggtgaaggc ttccataatt accatcacac
                                                                      420
ettteeettt gaetaetetg egagtgaatt tggettaaat tttaacccaa ccacctggtt
                                                                      480
cattgatttc atgtgctggc tggggctggc cactgaccgc aaacgggcaa ccaagccgat
                                                                      540
gatcgaggcc cggaaggcca ggactggaga cagcagtgct tgaacttgga acagccatcc
                                                                      600
cacatgtctg ccgttgcaac ctcggttcat ggctttggtt acaatagctc tcttgtacat
                                                                      660
tggatcgtgg gagggggcag agggtgggga aggaacgagt caatgtggtt tgggaatgtt
                                                                      720
tttgtttatc tcaaaataat gttgaaatac aattatcaat gaaaaaactt tcgtttttt
                                                                      780
ttttgtttgt tttgtttttg agacagagtc tcactctgtc acccaggctg gagtgcagtg
                                                                      840
gcgcagtctc ggctcactgc agcctccacc tacctggttc aagcaattct cctgcctcag
                                                                      900
cctcctgagt agctgagatt acaggagcct gccaccacac ccagctaatt tttttgtatt
                                                                      960
tttagtagag acagggtttc atcatgttgg ccagactggc ctcgaattcc tgacctcagg
                                                                     1020
caatccaccc gcctcggcct cccaaagagc tgggattaca ggcgtgagcc accgcaccct
                                                                     1080
gccgaaaaaa actttttttt ttttgagacg gaggeteget etgteeecea ggetggagtg
                                                                     1140
cagtggcgag atctcagctc actgcaagct ccgcctcccg ggttcacg
                                                                     1188
```

```
<210> 5275
<211> 2402
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (360)...(1355)
<223> similar to gi4104634 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 5275 cgcagtcccc gagcgagacc aaacaggtgg aatccgggct ggagccggag ctccggcggc 60 gegggtggeg geaegteeet ceagacagta ceaeaggeae etggagtaee ggeateggte 120 getgtggccc ccgagtgtcc gtcagagcct aggggagcct gcctcccgc gcctcgtcgg 180 ggcccggcca ggcaccttgg ccgccggcgc acggacgcgg gcacgagcac tagatcacgg 240 ctgctggacc tcggcacgtt gacaagattt ctctggggta ccgcggagga ttactttgaa 300 tttcggtggt cgcctgtggt ctggcatatt tagaacttaa gtctattatt tcgggcacca 360 tgactttgag gcttttagaa gactggtgca gggggatgga catgaaccct cggaaagcgc 420 tattgattgc cggcatctcc cagagctgca gtgtggcaga aatcgaggag gctctgcagg 480 ctggtttagc tcccttgggg gagtacagac tgcttggaag gatgttcagg agggatgaga 540 acaggaaagt agccttagta gggcttactg cggagactag tcacgccctg gtccctaagg 600 agataccggg aaaagggggt atctggagag tgatctttaa gccccctgac ccagataata 660 catttttaag cagattaaat gaatttttag cgggagaggg catgacagtg ggtgagttga 720 gcagagetet tggacatgaa aatggeteet tagacecaga gcagggeatg ateceggaaa 780 tgtgggcccc tatgttggca caggcattag aggctcttca gcctgccctg caatgcttga 840 agtataaaaa gctgagagtg ttctcgggca gggagtctcc agaaccagga gaagaagaat 900 ttggacgctg gatgtttcat actactcaga tgataaaggc gtggcaggtg ccagatgtag 960 agaagagaag gegattgeta gagageette gaggeeeage aettgatgtt attegtgtee 1020 tcaagataaa caatcettta attactgtcg atgaatgtct gcaggetett gaggaggtat 1080 ttggggttac agataateet agggagttge aggteaaata tetaaceaet taccagaagg 1140 atgaggaaaa gttgtcggct tatgtactaa ggctggagcc tttgttacag aagctggtac 1200 agagaggagc aattgagaga gatgctgtga atcaggcccg cctagaccaa gtcattgctg 1260 gggcagtcca caaaacaatt cgcagagagc ttaatctgcc agaggatggc ccagcccctg 1320 gtttcttgca gttattggta ctaataaagg attatgaggc agctgaggag gaggaggccc 1380 ttctccaggc aatattggaa ggtaatttca cctgagtctc agggaaccac gaagggatat 1440 ggcaacgagt agagcatgaa ggtagaacag tctatatact cttgtgacac atacaatccc 1500 taccttgtgc tgccaagtaa ctcatttttg tgcaattctc agtataagcc ctttgtcgtt 1560 totatgocta tttaaagtot ootaaaggtg taattgacta ggaaggatgt agttotacac 1620 tgccatttac ctatttaaat tcatccttgt gaatatcttt gttgttgttg ttgagacaga 1680. gtctcgctct gtcacccagg ctggagtgca gtggcgtgat cttggctcac tgcatcctcc 1740 geetteeagg titaagetat teteetgeet eagtigeeeg agtagetggg actaeaggea 1800 tgtgccacca cgcccagcta agttttgcat tatcagtaga gacggggttt caccatgttg 1860 gecaggetag titegaacte etgaceteaa gigatecace igetieggee teigaaagig 1920 ctgggattac aggcgtgaga cactgcgccc agcctcatcc ctgtgaattt cttattgtac 1980 acaagttett teactatetg tgtgeagtge tetgagggga eagacaagge ttgggtgtat 2040 atgccaacca gatctcattg aagtatcage ttgtttggta ctaggtgcaa gtgtagcatg 2100 tcacatgtga ccatgttggg atccattgac aatttttagg gtatgtactg gcctacattt 2160 atgatgaaga teetgagegg aggttaagat attaagttat ttteeatatg aateagaatt 2220 atattgattc tgtgcaatca aaacaaaagg cagaatagaa tgctgagatt ggttaagttt 2280 gcaatgacca tettgaacca cagatttetg etatgtgtea teaaaacate tagttetgag 2340

```
<210> 5276
<211> 3009
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(521)
<223> similar to gi63803 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 5276 tttcgtgccg tgcaagctgc ttatcccaga gagagatcca ttggaggaaa tagcagaaag 60 tteteeceag aeggeageea atteageage tgagetgttg aageaggggg cageetgeaa 120 tgtgtggtac ttgaactctg tggagatgga gtccctcacc ggccaccagg cgatccagaa 180 ggccctgage atcaccctgg tecaggagee tecacctgtg tecacagttg tgcacttcaa 240 ggtgtcagcc cagggcatca ccctgacaga caatcagagg aagctcttct tccggaggca 300 ttaccccgtg aacagtgtga ttttctgtgc cttggaccca caagacagga agtggatcaa 360 agatggccct tcctcaaaag tctttggatt tgtggcccgg aagcagggca gtgccacgga 420 taatgtgtgc cacctgtttg cagagcatga ccctgagcag cctgccagtg ccattgtcaa 480 ettegtatea aaggteatga ttggtteece aaagaaggte tgagaactee ceteceteec 540 tggacccacc gatgcctctc gaagccctgg agacagccgt tgggtgaggg tggggccccc 600 actitticce aaactagtaa accigacati ccaggeeeat gaggggaaag aggatetice 660 agetetgeaa aaacaagaac aaacaacate acegtgaatt ggeettteet gaaagtgact 720 tatctgacac atctctgtag ccacatgctt tttgggtaga agaagctggg catgggtgca 780 ecceacece tagggteece atgggaaagg gacatgcaag gaaacagcac agaacacgag 840 gtggtcccca tgtccctggc acactagcat tccgggggat gaggaatccc cagcccttga 900 ggcagaggtg ccgagtgact gccatgcttc gcccgtccgc atgggcgctt ctgtccagct 960 gcacccgagg ccgggggttt ccctcacctc ggtcttccca agatggagat gctaacgaaa 1020 ctgagaaggg ggcgtatgtt tgacgaaggt ttgtgcaagt caggcccttc tggaacacag 1080 cagggeetae aacgaggge etttgegatg ggetgtgagg atgggggtgg tgggaagaat 1140 tggccacgtt agagacccca tgccacccca ccatggtgag tgctctgtgc ctcctgctca 1200 cctgtggtga gctgggcgag ctgggcgagc tgggcgagct gggctgggga gagcctgtga 1260 ggaccgagag gagaaatgag aagaaggaac aaaaatatta tttctatgta atttatatt. 1320 tacttatgcc aaattattta tgataatttg ccattgctat actgtaccag tgtcaaatgc 1380 tgcagcctgc caagctgtga ttttgtgagg cttgtcccta tgtaggatgc accgcaggcc 1440 cotggccact gaaagagtgt gcagtggact gtgggtctcc catatgcggt gccgcccaaa 1500 ggtggctttg cctcaagcaa cctaccctga tgttttactc attggaatgt ttttccccga 1560 ttgtgggatg actctttct gatggagaga gtccaggagg gatggaaaac gcctggattt 1620 aagctcagca tececcacat gggetttteg atcatettea ggeetgaage tgeacgaeet 1680 gaagttcgcc tgcatttatc agccctcttt gtgctgctcc ttgccacctt ggggttcctg 1740 ctggggacca tgtgtggttg tggcatgtgt gagcagaagg gaggatgagg aaaaagagaa 1800 1860 gaaaccccgg tactgacaag ctgtttttga gtgccactgt ttgccatcat ctaagccact gaatcaagtg tatttcaggc ttatttcaac attccaatgc cctggttttc ctgcttgaat 1920 ctgttcgtgg tcaaaggttt gggggaattt gtgaccctgg aacatcccca gagtgaaaga 1980 tggagctggg ccacatcaga ataaggcctt ggccccatcc tctcacagcc taggtgctct 2040 gcaggcatgc tgactgtcct gattgcgatc cagcccgaaa ttccctcctc tgctttcaaa 2100

```
2160
agtcaaatcc cccattetta ggccacactg gtgtcacaag etectgtcag ggagetgggg
                                                                     2220
tttgggaatg tgctttgtga actctgcttt aaagtgaggg gccgaggaaa acttagaaac
aggcagagtt ggaagcagcc aaatcacagt gggtgttgtg tgtgtgtgcg tgtgtgcatg
                                                                     2280
cgtgcgtgta tgcgtgtgtg aaagcaggtg gaccattcca ctttttagct cctattgatg
                                                                     2340
caccaaacca agtgcctcat ttctgtgcca aatgtttgcc ttggtcgttg tggacctcct
                                                                     2400
tetetaaett geggtggeat gaetgteagg aggtgetgge atttteagea gateeteatg
                                                                     2460
tgttgaccct gatgtcttta gcagaggcct ctagcatctc ggtttttcat ccactgcagg
                                                                     2520
aatgtggcca cagggagcag aggtttgtac tttccccaag aggtcctcat cctgagacgg
                                                                     2580
tetetaceca tgtttäacec aaagagtgea ggecaggtte ettateette tgätgaagga
                                                                     2640
tgagagaget catttagaag teagageaaa etagggtete agtattgaga aacgeageet
                                                                     2700
gccagggaat cacagagaca tcggggtgcc cgcgatggcc ctcatgaagc catgcctcga
                                                                     2760
cggcattcag gaagccctgc aaacgtgctt tttgaactca ttggccaggt gtgattttta
                                                                     2820
cacaaggtaa acgtggtcaa gggcatcggg gaatttgctc caagcagata gctccctctg
                                                                     2880
aggaaccaaa ggaagcaagt ttccacgatt tctgaagagc tggtatagga agtttctttc
                                                                     2940
ttccttttgt gttacatgtg cattaaacag aacaagctgt gtgtcatcac agattgtact
                                                                     3000
gtgggctca
                                                                     3009
```

```
<210> 5277
<211> 873
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (129)...(618)
<223> similar to gi289622 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5277
gaattcccgg gtcgacgatt tccttgacgc taatgggggt gtggctggga ccctggggca
                                                                       60
gatttatgtt tagcccctcc cacggagggt gccgctgtaa ccccagcttc ctcccccggc
                                                                      120
ecccaggegt etetagegtg gaggtecagt ggatecegge eetgetgeee tettaetgee
                                                                      180
agtttgacaa geceetggag gaaccageee etacataetg eeeegagegg gggegggtge
                                                                      240
tgtgtcaccg ggccagcgtg ttctatcgcg tgggctggcc gctccccgcc atcgaggtgg
                                                                      300
attttccaga ggggattgac cgctacaagc actttgcccg gttcctgctg gaagggcagg
                                                                      360
tetteegeaa getggeetea taeeggaget gtetgetgte eageeeegge aeeatgetga
                                                                      420
agacgtgggc caggctgcag ccccgtacgg agagccttct gcgagccctg gttgcagaga
                                                                      480
aggetgactg ceatgaagee ttgetggetg ettggaagaa aaaccccaaa tacetgetgg
                                                                      540
ctgagtactg tgagtggctt ccacaggcca tgcaccccga tatcgagaaa gcctggcccc
                                                                      600
ccaccactgt ccactgacca gaaacctggc tgcagggccg aggactggtt tggggactgg
                                                                      660
agggetggea geagetggte accgtgegae egtgaecaee tggeatggge ttegtggeet
                                                                      720
gctctcagga agtgggtcaa gccctgggaa ccctcatcca tgagagctcg atcccgtatg
                                                                      780
aagggtgctg ccgcccgtgc catctggccc gggggtgact ttttgaactg tttattatat
                                                                      840
ggtggatgat gatttcatct cacgtgctgg aaa
                                                                      873
```

```
<211> 1489
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(497)
<223> similar to gi3930525 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

```
<400> 5278
tttcgtaaag tggagtgcac ccccagccgg gagcacctga agcaccagac cgtctaccgc
                                                                       60
ctgctcaagt gcgcccaag gggcaagaac ggcttcaccc ctctgcacat ggctgtggac
                                                                      120
aaggacacca caaacgtggg ccgctatccc gtgggcagat tcccctccct gcacgtggtc
                                                                      180
aaagtgetge tegactgegg ggeegaceeg gacageaggg attttgacaa caacaceeeg
                                                                      240
ctacacatag cagcccagaa caactgcccg gccatcatga atgccctgat cgaagcaggg
                                                                      300
gcccacatgg acgccaccaa tgccttcaag aagacggcct acgagctgct ggacgagaag,
                                                                      360
etgetggeea ggggtaceat geagecette aactacgtga ceetgeagtg cettgeggee
                                                                      420
cgggccctgg ataagaacaa gatcccttac aagggcttca tcccggaaga tctggaggcg
                                                                      480
ttcatcgaac tgcactgacc tgcccagaac gcctgcaccc tcacctctcc cctctcctgc
                                                                      540
tgagatgggg gaaatccggc tgcggcatag cagatgctcg ttcttgcctc cttcaqqcac
                                                                      600
caatcaggag aagggttctg cctcccatcc cctctacctg cagacagggt cggaggtgtt
                                                                      660
agegageett tggtgetaga ageetgeggg gteatgtget aagaggaeag tettteteeg
                                                                      720
ggageceget caeteattet gagttaggaa aagacacaag acetteecea cateetgtet
                                                                      780
gcctgggtta gggaggcctt tgccttgtta cctagaggcg gagggactga agccattgcg
                                                                      840
ttccttccct gctagaaaca caggaagaag ttgaggacgg tctgccttcc ctcgtccctt
                                                                      900
tacctggcca gataactcca gccgctgaat acagtgttag gactgggggc tcctgagatg
                                                                      960
agagtttgag attcagggaa tgagaccacc tctcatttct tccagcatga tcgcgccctg \
                                                                     1020
ctcccgtgcc accgtagtcc ctggcagaca ggcagggctc tgcccagggc agcctgccac
                                                                     1080
ttgcatagct ttcggttggt ttggtgttct gtttatttaa taagtgggca ggttgcaagc
                                                                     1140
gttgcacaga aattctgaga ttttactgcc ttttttttt tttaaaaaaa gtggttgggg
                                                                     1200
ggccccctta aggggaattt caacccgggg ggattttggg ggccctgaaa gggccgaggc
                                                                     1260
cccagggagg gacctgtttg tgtgaggaat ttggggagcg agaaaaaagc ccacggggtc
                                                                     1320
accccttaaa acagggggga ccggcctttt ttatactttt ccactttagg gcttttaaca
                                                                     1380
ggttttccga ttttacaggc ttttccaggt ttcctttttc tttagagaaa agacggggct
                                                                     1440
tccaaacaag attcgggagg gcccccaagg cctgaaacct ctttgcccg
                                                                     1489
```

```
<210> 5279
<211> 1614
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1011)...(525)
<223> similar to gi3916727 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5279
caaaactttt tttggtttt ttgtttgttc attcaacaag tgtttattga gcatctacta
                                                                       60
catqccagac actattctag aaacctggga aaggaggggt tagggtagct tggagctgtc
                                                                      120
ccagctgtag ctctgtctcc cagaagtgag gtctgcaggg gaacagggtc tgggggtcct
                                                                      180
cctgcctggg agagggaagg ctgagtgtat aaaaaggtgg aagcctctaa aaatgagaag
                                                                      240
gctgggtgtg tgggactcat gctggtgcct tcccagacga aggagaggc ccagaggagg
                                                                      300
cagetteetg gageagagae ggeageagga gegeeegtge eeggeateae eteetettea
                                                                      360
gcacggatat gcaggacttc ttgaggggcc cgatctgcaa gtgggcgtcc acactctcca
                                                                      420
ggaagaaggc aggcttgagt ctgtgggtga agagccccgc aaagtgactg tccaggcggc
                                                                      480
tetggaaggg gteaatgggg gaggeeggga tgeeacceeg geggggeegg gaggeettea
                                                                      540
gcctccgcag gaggctcatc ttgccgtccc gtacagcata gaaggccaag gcacggtcag
                                                                      600
cgtattccag gcagacccca accgtgggcg agaaggggtg gggcagggga gcctccagcc
                                                                      660
catgaaacca gacggagaag ctgcgtccat tccactgcag gcagcaggag tgggcgttgc
                                                                      720
ggcccagccg gccgcggtcg tagggctctt gtggggagaa gtcttcggcc atgacccca
                                                                      780
tgctgaccca gccctcgata atctccacct cccagtagta ggtgcctcgg tccagggcac
                                                                      840
cetegeceag cacetgetea caatgggtga agegggtggg egacaagggg tagttgatag
                                                                      900
gacacagcac cetettgaca cetttggtte caaacagetg caggaacttg tetgetgtgt
                                                                      960
cgctgtccaa atccacaata taggcaaact tgaggaaata gtccctggga gcttcactct
                                                                     1020
ccaagaggtt cgtactctcg aggtcttggg gctcagcatc agcttccgag tccagcttct
                                                                     1080
gtggcccatc ctcgttgcca cccggccccc tcagetgctc ccactggttg acgcaggcca
                                                                     1140
eggecageat gteteteact geaeggacag ettgggatga tttggtgaag etgageteee
                                                                     1200
tegggggtee aggeecaggg ceacacecat cetecaggge cageettagt gecageaget
                                                                     1260
cctgtgccag acaaatgccc attaaagtgc tgctggccat ggctcctcct tgctggggt
                                                                     1320
ggaggcaget etgecaggaa gteatgeace caetgeetee teeteeetee accecacetg
                                                                     1380
teccagette tgtteettee gtggeeecca gageggeett cacetgeagg aagetgaetg
                                                                     1440
agtcagette agggacetgg etgagattet ggegggeteg geteaggegg etgegetgtt
                                                                     1500
cetectgteg eegeaggtea eeetgggage ggeetageat ggeagaatee eeeteetega
                                                                     1560
tgaagcccag cacctgggtc tggaagccct gacgaaatcg tcgacccggg aatt
                                                                     1614
```

```
<210> 5280
<211> 2157
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2114)...(1712)
<223> similar to gi4929585 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5280
ttgagatgga tcagaacttt gtaattatat tcaggaggag ttctgtctat tcattcatca
                                                                       60
tgacatgtgt agtatcatgt gctttttttt ttaaaattta ggtttaatac attttcaatc
                                                                      120
agcctatgca catggaatat gcgccattta gaaccgtgga attctgggcc cagctggact
                                                                      180
cagccagcac agagcaaaca ctgttagtaa tgatttgaac acttttttga atactcggta
                                                                      240
tateteaett eeegtggeat gatgaaaaea aacatttatt gaacaegaae tatgtgetag
                                                                      300
atgtaccett tgtetttatg ttgettatgg tetggggagg aaagagaege taaacaagta
                                                                      360
accacaagtt tataagtttt acaaaagggg cagatgatat gccacagaga tgcagaacag
                                                                      420
aggggtccga gtctagttta gggaatcagg ggaaggcatc tctgcataag gaatatttga
                                                                      480
```

```
gctgagatcc agaggatgag aggaagttag agcaggatgc agggagcagt acatgtgtgg
                                                                      540
gcttcccttg aacttaggaa gaaagggtgt ttaatgggca gcaggaagta ctaagctcca
                                                                      600
cetetetact gtgaactggg gettgeecca tecacactgt ggatetegae teeteatttg
                                                                      660
tcatgagtgg ttggctgaga gggcctgtgc tgacctggac tctgggctgg gtctagcggg
                                                                      720
caaacgccac actaaaagga gaaggagtcg tgggtaggca ggcaaccctc aggactccct
                                                                      780
tetetcagge ateacacagg etgttgegaa tteageacea eeagtgatea gageaatttt
                                                                      840
                                                                      900
aaacatcatc cccaccggta atttttactc gtttctttat taatatagaa aaggagccca
gggcagetgg accagtagta caaagcacca ggagttaata ccattetggt gaaggggatg
                                                                      960
gttttacaaa agtgaaggag caggcaggag ccaccaggtt ctgaggccag gcccagccta
                                                                     1020
ctgcccagaa cccctgaaac ggctccctgg gaaaaagctg acagatgggt caggggtgga
                                                                     1080
ttgagctgga aaccatgggg acagatggca gggatagagg gtcatgcagt gggaaccacc
                                                                     1140
cagtggctga taaggacagg gaacttgtgg ctggaggctc cccattgggc catgggcagg
                                                                     1200
ggcttgcaga tggcctcagc tctgggggca ggtagagaaa ctgcagagac tgatgggcat
                                                                     1260
ggagaaccca gacatggccc tggggctgaa gggcctttcc accctctctt caccaggagc
                                                                     1320
cacctttgct ctatactaca tatggggctt cagggcccaa ggcacagggg aggctcagag
                                                                     1380
gcctccagtt gggaggaaga tggggcaagg aaggaagcac ttgagtgtcc ctagcttagg
                                                                     1440
cagccgggga tgagacacag gcaggacaac agcaccccg catagtgggg ctagaatgtg
                                                                     1500
ggacagggac gggcttatcc teggccagtg actaggacca gccccatggc aatggtgcct
                                                                     1560
gtetecagee ttageaaate aagtgtgeaa caageacagg gtgteggeag acetgggete
                                                                     1620
tageettaca agetetgeea gaacttgaat cacacagage tgtateacea tggtecagee
                                                                     1680
atgreetgee tiggeetgit tectectetg teaatgagga teatgetggg gateceeatg
                                                                     1740
gtctcccgcc atgtctctat cgatgtcaca aactcatcct cagccccctc cgggtccctt
                                                                     1800
gggaatgetg geettgaget tegecegaag ceaaacagat egaaggtgtg cagtgtgegg
                                                                     1860
egggeactea gtgagteeat gttgaggate cagagaceca egeegeeeee aaaaceatge
                                                                     1920
accatcacca agggggtgcg gtcgttttgc tcggggctca cagtcaccgt ccagatctta
                                                                     1980 ·
ttttggtttg ggagggatac atatctggcc aggaacttat tctggaggaca ctggaggatc
                                                                     2040
ctggcttcca cattettcag ctgagacatg taagtggggc gccacgtaaa cagccagcta
                                                                     2100
ctcagccage cttgagcctg ctgctccaga tcatgcgaaa tcgtcgacca ggggatt
```

```
<210> 5281
<211> 1691
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (7)...(798)
<223> similar to gi558671 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5281
tttcgttcca tcatctccgt gctgccttgg aagagaatcg tggccgtgtc ggccaagaag
                                                                       60
aagaacteca agaaggtgea geecaacage agetaceaga acaacateae geaceteaae
                                                                      120
aatgagaacc tgaagaagtc gctgtcgtgc gccaacctgt ccacattcgc ccagcccca
                                                                      180
ccggcccagc cgcctgcacc cccggccagc cagctctcgg gttcccagac cgggggctcc
                                                                      240
tecteagtea agaaageeee teaccetgee gteaceteeg cagggaegee caaaegggte
                                                                      300
atcgtccagg cgtccaccag tgagctgctt cgctgcctgg gtgagtttct ctgccgccgg
                                                                      3.60
tgctaccgcc tgaagcacct gtcccccacg gaccccgtgc tctggctgcg cagcgtggac
                                                                      420
cgctcgctgc ttctgcaggg ctggcaggac cagggcttca tcacgccggc caacgtggtc
                                                                      480
tteetetaca tgetetgeag ggatgttate teeteegagg tgggetegga teaegagete
                                                                      540
```

```
caggoogtoc tgotgacatg cotgtacete tectacteet acatgggeaa egagatetee
                                                                      600
tacccgctca agcccttcct ggtggagagc tgcaaggagg ccttttggga ccgttgcctc
                                                                      660
totgtoatca acctoatgag otcaaagatg otgcagataa atgcogacco acactactto
                                                                      720
acacaggtct tctccgacct gaagaacgag agcggccagg aggacaagaa gcggctcctc
                                                                      780
ctaggcctgg ateggtgage actgtttect gegteatgge teaaggatte aatgeatttt
                                                                      840
taagaattta ttattaaatc agttttgtgt acagtatgtg tctagcaaag ccaccaaggg
                                                                      900
ceteacettt eccaeagtet etecetgggg ttttttteat ecctgeeaag aactetggge
                                                                      960
acttttgaac tcacgagcet tgcgcaaaac ccagaagatg tattcagage cacccaggce
                                                                     1020
actgacetee cactttgggg aactcaaagg actgacetge eeetgeegee tgtgeeettg
                                                                     1080
etgggtecag ggtaggeaag getgeegget geaccetgta tggagetaga gaggggeete
                                                                     1140
tggctgcctg gcccagggag gaattggggt ttctggttgg aggccctttt ctggctcctg
                                                                     1200
tgtggagtta ttcactctcc cagaggctcc tggagccagc caccctaact gagctgccag
                                                                     1260
tggggtcgtg aggcaagatc cccgccaccc ggggacatct tcaatctagg cgaggcgaag
                                                                     1320
ctgagcgggt ctagtggaaa gattgtgtct ggtcgtttga ccacacaccg ccctgatttg
                                                                     1380
ctgatttctt tttttaggga gaagggcttt tctttagtgg agaaatggaa ctcgccccc
                                                                     1440
tacccccttg tctgctgctc ccagccacgt tggtggtatt ggccgatgag ctggtttgac
                                                                     1500
tcattaattt ctctcaattt gggtcccagc taaagaggtg gggtgaagct ggggacagct
                                                                     1560
ttcctgggtg agtttttctt ttgaataatg tagtgcagtc accctgtggg caaatgccag
                                                                     1620
ggacagetge aggtgeecat tageaacgee tgeettetgg geaaggtgag ggatgeeata
                                                                     1680
ccttgagacc a
                                                                     1691
```

```
<210> 5282
<211> 2593
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (457)...(1154)
<223> similar to gi4587558 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5282
ggcccggaat tcctcgggtc gacgatttcg tggagagtcg ggggtcacca ggcctatcct
                                                                        60
tggcgccaca gtcggccacc ggggctcgcc gccgtcatgg agagcggagg gcggccctcg
                                                                      120
etgtgccagt tcatcctcct gggcaccacc tctgtggtca ccgccgccct gtactccgtg
                                                                       180
taccggcaga aggcccgggt ctcccaagag ctcaagggag ctaaaaaagt tcatttgggt
                                                                       240
gaagatttaa agagtattet tteagaaget eeaggaaaat gegtgeetta tgetgttata
                                                                       300
gaaggagetg tgeggtetgt taaagaaacg ettaacagee agtttgtgga aaactgeaag
                                                                       360
ggggtaattc agcggctgac acttcaggag cacaagatgg tgtggaatcg aaccacccac
                                                                       420
ctttggaatg attgctcaaa gatcattcat cagaggacca acacagtgcc ctttgacctg
                                                                       480
gtgccccacg aggatggcgt ggatgtggct gtgcgagtgc tgaagcccct ggactcagtg
                                                                       540
gatctgggtc tagagactgt gtatgagaag ttccacccct cgattcagtc cttcaccgat
                                                                      600
gtcatcggcc actacatcag cggtgagcgg cccaaaggca tccaagagac cgaggagatg
                                                                      660
ctgaaggtgg gggccaccct cacaggggtt ggcgaactgg tcctggacaa caactctgtc
                                                                       720
cgcctgcagc cgcccaaaca aggcatgcag tactatctaa gcagccagga cttcgacagc
                                                                      780
ctgctgcaga ggcaggagtc gagcgtcagg ctctggaagg tgctggcgct ggtttttggc
                                                                      840
tttgccacat gtgccaccct cttcttcatt ctccggaagc agtatctgca gcggcaggag
                                                                      900
egectgegee teaageagat geaggaggag tteeaggage atgaggeeea getgetgage
                                                                      960
cgagccaagc ctgaggacag ggagagtctg aagagcgcct gtgtagtgtg tctgagcagc
                                                                     1020
```

```
ttcaagtcct gcgtctttct ggagtgtggg cacgtttgtt cctgcaccga gtgctaccgc
                                                                   1080
gccttgccag agcccaagaa gtgccctatc tgcagacagg cgatcacccg ggtgataccc
                                                                   1140
ctgtacaaca gctaatagtt tggaagccgc acagcttgac ctggaagcac ccctgccccc
                                                                   1200
ttttcaggga tttttatctc gaggcctttg gaggagcagt ggtgggggta gctgtcacct
                                                                   1260
ccaggtatga ttgagggagg aattgggtag aaacteteca gacccatgce tecaatggca
                                                                   1320
ggatgetgee ttteccaect gagaggggae cetgtecatg tgeageetea teagageete
                                                                   1380
accotgggag gatgoogtgg cgtotoctoc caggagocag atcagtgoga gtgtgactga
                                                                   1440
aaatgeetea teaettaage aecaaageea gtgateagea getettetgt teetgtgtet
                                                                   1500
tetgtttttt tetggtgaat egttgettge tgtggaettg gtggaggaet cagaggggag
                                                                   1560
gaaaggetgg geeeegagta caacggatge ettgggtget geeteegaag agaetetgee
                                                                   1620
gcagcttttc ttcttttcc tcatgccccg ggaaacagtc tttcttcaga attgtcaggc
                                                                   1680
tgggcaggtc aacttgtgtt cettteecet cacetgettg ceteettaac geetgeacgt
                                                                   1740
gtgtgtagag gacaaaagaa agtgaagtca gcacatccgc ttctgcccag atggtcgggg
                                                                   1800
ccccgggcaa cagattgaag agagatcatg tgaagggcag ttggtcaggc aggcctcctg
                                                                   1860
gtttcgccac tggccctgat ttgaactcct gccacttggg agagctcggg gtggtccctg
                                                                   1920
1980
gccactggcc tagtgtcctg gcctcacagc ttccttgcaa ggctgtcaca aggaaaagca
                                                                   2040
geeggetgge accetgagea tatgeeetet tggggeteee teateeagee egtegeaget
                                                                   2100
ttgacatett ggtgtactca tgtcgcttct cettgtgtta cecectecca gtattaccat
                                                                   2160
ttgcccctca cctgcccttg gtgagccttt tagtgcaaga cagatggggc tgttttcccc
                                                                   2220
cacctetgag tagttggagg teacatacae agetetttt ttattgeeet tttetgeete
                                                                   2280
tgaatgttca tetetegtee teetttgtge aggegaggaa ggggtgeeet caggggeega
                                                                   2340
cactagtatg atgcagtgtc cagtgtgaac agcagaaatt aaacatgttg caaccaaaaa
                                                                   2400
aaaaaaaagg gggggggctt tcaaaggggc caggtttttc taccgggggc ggggagtgaa
                                                                   2460
aaaccttttt taaggggccc caaaattcaa tacccgggcc cgggttataa cgctttggat
                                                                  2520
gggaaacccc tggggttcca aaactaatcc tcttaaaaaa aaaggaatca agtttctcgt
                                                                  2580
atggtctctt aaa
                                                                  2593
```

```
<210> 5283
<211> 1139
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1140)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (976)...(503)
<223> similar to gi2447128 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5283
acgatttcgt gttctgcca gttacactta attttgacat atcagtcagt ctggtgccgg 60
aagaacttct tagttctctt tttgatgatc ctgggcttca caaggggtct gagggtggcc 120
atgatgctga ggaggagatg gctgccacct ccgtaggcag cgccgagaga ggggcttttt gttttttgag acttcaattt aaattttact ttnnnnnnn nnncttacaa aatacaaagt 240
aaaaagaatg agaacaaaat aaattttcag atacccaaaa attgaaagag ttcataccaa 300
```

```
360
aagacttcac taaatgaaca ctgaaagacg accttcagaa aaaaacaaaa tgatcctgga
cagtagtgta aagatataga aagatgaggc catgcaggta ggtaggtgcc aaattatgta
                                                                      420
agtocagcat gocaagocaa ggaatcagag gotocacagg gatotaagga ggttotggaa
                                                                      480
ggtttccatt gtagtccaca tcttctatgc tacaacccca tttaacaaga agttgcaagc
                                                                      540
                                                                      600
agccaagccg cccatgaaaa gctgcataat gcacaggtct ccattctctc ttatcagtca
cactgggatc cactccactt cggagcatta tttgtaaagt gaaagaatgt ccatgagttg
                                                                      660
cagcaagatg taaaggagtg cateceeggt cateetggge tgteagattt getecattea
                                                                      720
ttataagage etgtacacaa geateetgae eeetgattge agetatgtga gatgetgtee
                                                                      780
                                                                      840
aacctctcgt tgttacgtgt gtgatatcag ctccatgcca gagcagccaa tgaagacact
ccaaacttcc agaatgtgct gcccaatgta aaggggtaaa cttatggaga acatcaagtt
                                                                      900
                                                                      960
cattaatgct ggctccacgt accactattt ctgaaagctg ctttacatct ccagctcgta
ctgcatcatg tatgctgcca aaatgcacct tcttcctgga acaggggtgt gcagtctcac
                                                                     1020
tagagaaagt ggaggggcct gaattgccca ccccgggcat ggcgcaacac ctccgactct
                                                                     1080
ggggaggagt tgagtccagg cccctgatgc tgcggcggtc ttccgttgcc gaattcacc
                                                                     1139
```

```
<210> 5284
<211> 2035
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (735)...(1156)
<223> similar to gi30474 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5284
                                                                       60
tttttttttt ttagetttgt eagteettta ttetetetag aggagggget eagtatatea
                                                                      120
cagcagtggc tgatgtcggg tgcttgccac agctcagcac tgctctaata actcatccta
                                                                      180
accacaccaa geettgetga gacctetgag daateccace aggagataca gtgaggteda
gccactcagg ccacacagcg aacaggaggc agggctggta tgggtgcagg tgccaacccc
                                                                      240
gactgtgccg cetetegget aageacetgt geagtgactg agtgggeteg caaacagagg
                                                                      300
                                                                      360
getetgeagg tggageacce caggeaagte eccaccatea geeccattet geaggegegg
ccceggggcc agggatggga gggtcttgcc gggcatccag cgaggagact gcatattccc
                                                                      420
tgeccaatet ggetteaegg eggeggaaet gaegeeaegt eeeagggegt teggggetge
                                                                      480
                                                                      540
caggeetggt gageacegeg gacateteag atggeegtte tgeaggttga ggeeeteggt
                                                                      600
gecagegied eegigggeag tietgigget teeciggeed aigtegiedt citiggeagig
gccacatcac agcaccaggt gggatcaaag gggagggcag ctccccaggt ggacctgagc
                                                                      660
                                                                      720
tteteacaet etgaeaagee etegeetget gatecaagae acagtggeet ttgaaatteg
attteettee eeaggggge ttegggatee tggaggagat gtgtgteaac taegtgeact
                                                                      780
                                                                      840
actaccecca gaegeagetg gagetetgea agagegetgt ggaegeegge tteetgeaga
                                                                      900
agtacttcca cctcatcaac aggttcaaca acgaggatgt ctgcacctgc cctcaggcgt
                                                                      960
ccgtgtctca gcagttcacc tctgttccct ggaactcctt caaccgcgac gtactgaagg
ccctgtacag cttcgcgccc atctccatgc actgcaacaa gtcctcagcc gtccgcttcc
                                                                     1020
agggtgaatg gaacetgeag eccetgeeca aggteatete cacaetggaa gageecaece
                                                                     1080
cacagtgccc caccagccag ggccgaagcc ctgctggccc caccgttgtc agcattggtg
                                                                     1140
                                                                     1200
ggggcaaagg ctgaggggg acctactcct coccetecte catgetgtee ctgtgggete
acaceggeae tgtgeaetet aetetgegae gateeecatg gaacageeet geaegeecag
                                                                     1260
gatgaagggg ccagaccacg ccctgcctg agaccacggt ccaatccagc cttcttcccc
                                                                     1320
cagggteccc tgcatggetg agagggtgtg ggtgccctgt tgacctaccc tggaccgagt
                                                                     1380
```

```
1440
ggaccacqac ctcgtccatt taaacccggc tgactcagtg cagggacagc ccgcacagtg
                                                                     1500
gtccagggtc cagccctccg ccagccctgt tccgcctcac tgggtgtggc ctggcttctg
                                                                     1560
ggacaggcac catgctgggc cggggtgtgg aatcaccggg aacgcccccg cccccgcccc
                                                                     1620
gctgctcccg gtgtgcagcg ggtgcgggtg ccgcttaaac atttccctgc tgagtggctc
                                                                     1680
gtgtttcaca gtgggcggct tccctgcgac ggaggcagga ccaggcattt agctagttag
agactegeet gggaaattge tecatteetg agtaaacaga tattttegee cacetaaagg
                                                                     1740
                                                                     1800
qaaqccctga caacaactat caccaaaaga cgaggcggca aagatccagc ggggcttctg
                                                                     1860
ggcgccggtt ccacgtgggg tggaattatt agcaccagct tgcttctctg ccggtggggc
cagcgctgaa cagaccgggg tggagtcagg gctgtgcttt ccgcgtggtt ctgccactta
                                                                     1920
gggagtgtgc cttgggcggg ccatttcaca ttcctgaccc tcacttttct catctgtaaa
                                                                     1980
                                                                     2035
accaggetga tgeegtgegg getaatgage caataaaget cacaettggg etgge
```

```
<210> 5285
<211> 1560
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(1146)
<223> similar to gi2656015 in the genepept database release 114;
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5285
gaggagcaat teetgaagag eteceacagt tggacagaga gaccetgtge cagtggagca
                                                                       60
cactetecta teetggeetg gtgaaggage tgtgtgeeet etteattgge tetgagetee
                                                                      120
                                                                      180
ttccaaaaga tgaattaaat gatctgatcg accgagcett cagcagatte cgtcacagag
aagtggtcca totgtccagg ttgaggaatg ggctgaacgt gttggagctg tggcatggcg
                                                                      240
tcacatatgc atttaaggac ctgtccctgt cctgcacaac acagttcctg cagtacttcc
                                                                      300
                                                                      360
tggagaagag ggagaagcac gtcactgtgg ttgtaggaac atctggggac acaggaagtg
ctgccattga gagtgttcaa ggggcaaaga acatggacat tatcgttctg ctgcccaaag
                                                                      420
gtcactgcac aaagattcag gagctccaga tgacaacggt gctgaagcag aacgtacatg
                                                                      480
tgittggagt ggagggaaac agcgatgagc tcgatgagcc gatcaagact gtgittgccg
                                                                      540
                                                                      600
atgtggcttt tgtcaagaag cacaatctga tgagcctgaa ttcgatcaac tggtcccggg
                                                                      660
tectggtgea gatggeeeat caettetttg ettaetteea gtgtaegeea teettggaea
                                                                      720
cacateceet acceetggtg gaggtggttg tgccaacagg ggetgeeggt aacettgcag
                                                                      780
ctgggtacat tgctcaaaag ataggcctgc ccatccgtct ggtcgtggca gtgaaccgca
                                                                      840
atgacatcat ccacaggact gtccagcagg gagacttctc tctctctgag gctgttaaat
                                                                      900
caaccttggc atcagctatg gacattcagg tgccctacaa catggagagg gtgttctggc
                                                                      960
tgetetetgg etetgaeage caggtgaeaa gageeeteat ggageagttt gaaaggaeee
                                                                     1020
aaagtgtgaa tetgeeeaag gaactgeaca geaagettte agaggeagtg acateegtgt
                                                                     1080
cagtgtcgga tgaagccatc acccagacca tgggccgctg ctgggatgag aaccagtact
                                                                     1140
tgctgtgccc ccactcagcg gtggccgtga actaccatta ccagcagata gacaggcagc
                                                                     1200
ageccaggta caggeaatgg gggeetggge caetgaggga ccatttgaat tteaggggee
ctettettet ecaageagtg ggagagaeag gactaegaaa aaatggetgt aatggagtgt
                                                                     1260
                                                                     1320
gatgggtgct gtgtggaact gtgccttgga aactgtgggc ccagaagagg gagcgtgaca
                                                                     1380
gatateceag ggacageeat ggteagaggt ggtggetgag etggeeteea aceaggagga
                                                                     1440
gcagtttgcc aggtagcgtc attgtagcaa taagttcaag gtgccaattg tctgtctgtg
                                                                     1500
tetetgteet ceatacecee ceatecetaa acttectetg titettatte etectecace
tteteettte ccatetetet atteteteat tggeeteegg etgeeaeetg eccecatece
                                                                     1560
```

```
<210> 5286
<211> 845
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (776)...(390)
<223> similar to gi458230 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 5286 ctggaaaata cataaaaaca tatgtatcac cagtaaatga atcagtaaag tacaatataa 60 cacaaaagaa aaagaaatat tgcttgattt tttccaataa aagcaagggt aataaaaaca 120 180 tttttagtaa gaaaatctat catttttatt ttaaaaatct ttcaatttta aacatcatta ccaacacatt aaaagtatta tcaataagtg cctttacaat ttcaagcaaa agctactgtg 240 ttttccttat tggaaatact getttcagte atettttttg tetgaggtac tetettcatg 300 cttttcaggg ctgactttat tactggcggt ggagggggtt gtctggactt cttttggtaa 360 tgaaaacaca tggcacgtct ggaggtctag gtatgttgta aatatcttag catattctgg 420 atgetttaag geaaaaettt taaatteete ataggaaatt gagteeeett gggetattte 480 540 cttgaagaga ccagaaacat caaggtcagg cactccaagg gaagcctgta gaatggtgga quactettee teegttatgt agecateete ateaaegtea aacagettaa atgecacetg 600 660 gatgatetee tetgtgttgg aagggttgea caagacagee aggeeaatea catacteteg gaagtcaatg ctgccatcat ggttcctgtc aaagagtgca aaaagttgtc tcaagacatc 720 780 tgaaacagge aactttaaat acttggegaa ttetteaatt ecaattette eteettttga 840 ggaactcgca atagatgcat attcatccaa atgcttacga acaccatccc aatctaattt 845 caatt

```
<211> 1973
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1829)
<223> similar to gi2988397 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

<210> 5287

```
<400> 5287
gaaaggctaa ccggtggttt ggggttgctc cccctaaatc tggaaaaatg aacatgaaca 60
tccttcacca ggaagagctc atcgctcaga agaaacggga aattgaagcc aaaatggaac 120
```

```
agaaagccaa gcagaatcag gtggccagcc ctcagccccc acatcctggc gaaatcacaa
                                                                      180
atgcacacaa ctcttcctgc atttccaaca agtttgccaa cgatggtagc ttcttgcagc
                                                                      240
                                                                      300
agtttetgaa egetgggaag aggteeetge teateageag geggaeagge etggggetgg
ccaqcetgee gggecetgtg aagagetact cccaegecaa geagetgeee gtggegeace
                                                                      360
                                                                      420
gecegagtgt ettecagtee eetgaegagg acgaggagga ggaetatgag eagtggetgg
                                                                      480
agatcaaagt ttcaccccca gagggagccg agactcggaa agtgatagag aaattggccc
                                                                      540
gctttgtggc agaaggaggc cccgagttag aaaaagtagc tatggaggac tacaaggata
                                                                      600
acccagcatt tgcatttttg cacgataaga atagggggga attcctctac tacaggaaga
                                                                      660
aggtggctga gataagaaag gaagcacaga agtcgcaggc agcctctcag aaagtttcac
                                                                      720
ccccagagga cgaagaggtc aagaaccttg cagaaaagtt ggccaggttc atagcggacg
                                                                      780
ggggtcccga ggtggaaacc attgccctcc agaacaaccg tgagaaccag gcattcagct
ttctgtatga gcccaatagc caagggtaca agtactaccg acagaagctg gaggagttcc
                                                                      840
ggaaagccaa ggccagctcc acaggcagct tcacagcacc tgatcccggc ctgaaqcgca
                                                                      900
agtoccotco tgaggocotg toagggtoot taccoccago caccacotgo cocgoctogt
                                                                      960
ccacgcctgc gcccactatc atccctgctc cagctgcccc cgggaagcca gcctccgcag
                                                                     1020
ccaccgtgaa gaggaagcgg aagagccggt gggggcctga agaggataag gtagagctcc
                                                                     1080
cacctgctga actggtgcag agggacgtgg atgcctctcc ctcgcctctg tcagttcagg
                                                                     1140
acctcaaggg gctcggctat gagaagggga agcctgtggg tctagtgggc gtcacagagc
                                                                     1200
tttcagacgc ccagaagaag cagctgaagg agcagcagga gatgcagcag atgtacgaca
                                                                     1260
tgatcatgca gcacaagcgg gccatgcagg acatgcagct gctgtgggag aaggcagtcc
                                                                     1320
aacagcacca gcacggctat gacagtgatg aggaggtgga cagcgagctg ggcacctggg
                                                                     1380
agcaccagct geggegeatg gagatggata agaccaggga atgggeegag cagetgacaa
                                                                     1440
agatgggccg gggcaagcac ttcatcggag acttcctgcc tccagacgag ctggaaaagt
                                                                     1500
ttatggagac cttcaaggcc ctgaaggagg gccgtgagcc tgactactca gagtacaagg
                                                                     1560
agttcaaget gaetgtggag aacategget accagatget gatgaagatg ggetggaagg
                                                                     1620
agggcgaggg gctgggctca gagggccagg gcatcaagaa cccagtgaac aagggcacca
                                                                     1680
ccacagtgga cggcgctggc ttcggcattg accggccggc ggagctctcc aaggaggacg
                                                                     1740
acgagtatga ggcgttccgc aagaggatga tgctggccta ccgcttccgg cccaacccc
                                                                     1800
tgaacaatcc cagacggcct tactactgag tgttctggaa atacatactt tctgaatgac
                                                                     1860
caaccgtccc tggactgtgg aatgttccgg cctgcatttc tgcccacccc ttccgttgtc
                                                                     1920
acgagtgccg tgccgtgtaa taaagtccca gtgctcatcc accacaaaaa aaa
                                                                     1973
```

```
<210> 5288
<211> 684
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (207)...(402)
<223> similar to gi5630082 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
agccagacat gatcacccgt ttggaagggg aggaggagtc tcagaattct gacgagtggc 420
agctccaagg aggcacctct gcagaaaatg aagaatctga cgtaaagcct ccagactggc 480
caaacccaat gaatgctacc tcccagtttc ctcagcctca gcactttgac agctttggcc 540
tccgtctgcc tcgggatatc acagagctgc ccgagtggag tgagggggtac ccttctacat 600
ggccatggct tcccagggta tgacctctcg gctgatgaca tagctgggaa gtttcagttc 660
agccgggcat gcgcgcagtt acga
```

```
<210> 5289
<211> 4583
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1598)
<223> similar to gi505102 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 5289 egegtgteta egeggaegea eeggetaage tgettetgee geegeeggee geetgggaee 60 ttgeggtgag getgegeggg geegaggeeg ceteegageg ceaggtttat teagteacea 120 tgaagetget getgetgeae eeggeettee agagetgeet eetgetgaee etgettgget 180 tatggagaac caccetgag geteaegett cateceeggg tgeaceaget ateagegetg 240 ceteetteet geaggateta atacateggt atggtgaggg tgacageete actetgeage 300 agetgaagge cetgeteaac cacetggatg tgggagtggg ceggggtaat gteacecage 360 acgtgcaagg acacaggaad ctctccacgt gctttagttc tggagacctc ttcactgccc 420 acaatttcag cgagcagtcg cggattggga gcagcgagct ccaggagttc tgccccacca 480 tectecagea getggattee egggeetgea eeteggagaa eeaggaaaac gaggagaatg 540 agcagacgga ggaggggggg ccaagcgctg ttgaagtgtg gggatacggt ctcctctgtg 600 tgaccgtcat ctccctctgc tccctcctgg gggccagcgt ggtgcccttc atgaagaaga 660 cettttacaa gaggetgetg etetaettea tagetetgge gattggaace etetaeteea 720 acgecetett ceageteate eeggaggeat ttggttteaa eeetetggaa gattattatg 780 tetecaagte tgeagtggtg tttggggget tttatetttt etttteaca gagaagatet 840 tgaagattet tettaageag aaaaatgage atcateatgg acacageeat tatgeetetg 900 agtogottoc otocaagaag gaccaggagg agggggtgat ggagaagotg cagaaggggg 960 acctggacca catgattect cagcactgca gcagtgaget ggacggcaag gcgcccatgg 1020 tggacgagaa ggtcattgtg ggctcgctct ctgtgcagga cctgcaggct tcccagagtg 1080 cttgctactg gctgaaaggt gtccgctact ctgatatcgg cactctggcc tggatgatca 1140 ctctgagcga cggcctccac aatttcatcg atggcctggc catcggtgct tccttcactg 1200 tgtcagtttt ccaaggcatc agcacctcgg tggccatcct ctgtgaggag ttcccacatg 1260 agctaggaga ctttgtcatc ctgctcaacg ctgggatgag catccaacaa gctctcttct 1320 tcaacttcct ttctgcctgc tgctgctacc tgggtctggc ctttggcatc ctggccggca 1380 gccaettete tgccaactgg atttttgege tagetggagg aatgttettg tatatttete 1440 tggctgatat gttccctgag atgaatgagg tctgtcaaga ggatgaaagg aagggcagca 1500 tettgattee atttateate cagaacetgg geeteetgae tggatteace atcatggtgg 1560 tcctcaccat gtattcagga cagatccaga ttgggtaggg ctctgccaag agcctgtggg 1620 actggaagte gggeeetggg etgeeegate geeageeega ggaettaeea teeacaatge 1680 accacggaag aggccgttct atgaaaaact gacacagact gtattcctgc attcaaatgt 1740 cagccgtttg taaaatgctg tatcctagga ataagctgcc ctggtaacca gtctctagct 1800 agtgeetett geceteteet caceteettt teteteagtg actetggaae etgaatgeag 1860

```
cttacaaqac aaqcctgact tttttctctg attaccttgg cctcctcttg gaaccagtgc
                                                                     1920
                                                                     1980
tgaaaggttt tgaatccttt acccaacaat gcaaaaatag agccaatggt tataacttgg
                                                                     2040
ctagaaatat caagagttga atccatagtg tggggcccat gactctagct gggcaccttg
                                                                     2100
gacctccagc tggccaatag aagagacagg agacaggaag ccttcccatt ttttcaaagt
                                                                     2160
ctgtttaatt gcctattact tctctcaaag agaacctgaa gtcagaacac atgagcaggg
                                                                     2220
tgagaggtga ggcaaggttc atcctgaatg ggagaggaag tcgaaccact gctgtgtgtc
                                                                     2280
ttgtcaggat gctcacttgt tcctactgag atgctggata ttgattttgt aacagcacct
                                                                     2340
ggtgtttcac ggctgtccga gtgagctaac gtggcggtgt ggctgcctgg acctcctctt
                                                                     2400
tcaggttaac gctgacagaa tggaggctca ggctgtctgc aagaaaacag ttggtttggc
                                                                     2460
tgtgattttg acctectett ecceaetgee atettetaag agaetttgta getgeeteet
                                                                     2520
agaagcacat tetgagcaca tttgagacet etgtgttaga ggggagaetg cacaaactat
cctccccag gttgagacgt ctgcagagtg gcaagctgac ttgtagaaat ggggtgccat
                                                                     2580
                                                                     2640
ttatgeteta ettaqaeaaq qqtaateaqa aatggaatea gtgeaggeaa aatttaggat
                                                                     2700
ttgccgcttc cataaatcaa agcatgacta atagggggtc tctgaaatgt aagggcacaa
                                                                     2760
acttcactta gggcatcgca gatgtttgca gaatggttgg cctaatgatt atgctacaga
tgggttttaa atgacccgtc taggttactg cttccttgca aaaaaagtcg aatcctgcat
                                                                     2820
tgaattgaat atgaatttct ctaactctct ccagaaaatg gatggagata acttgtcttt
                                                                     2880
aaaactgtag gccagcctta gccactgtgg agcccttgcc tccgagctct ggcttcaagg
                                                                     2940
ggagetette tecaggitea etaggigaat igatitatia tiateatati gataatgiga
                                                                     3000
gattetttag ecaetttggg gageetgtét etecagaage etttettagt ggtgeecaeä
                                                                     3060
gttggagccc aggggccatg tttgcaaact gattcatgtg catggctgac aggagtactg
                                                                     3120
gttcactacc aatgeetgag ettttetett acatagaaaa actgteeact etcagtaate
                                                                     3180
acaagcagca teegttttgt tttetettet tgggagacat etgteaaace aggaatatte
                                                                     3240
ttgaaaagaa cgtgagcagg aaaaactgct ggtgatactt tttttaagtt ttgtttttat
                                                                     3300
cttgcctgtt ggcttcaata catttgagaa tacgctgaag agggaaaatt tcagtgatgg
                                                                     3360
agattetaga ttaaatatea ggaetgattt eetggtggga ttatggteea gttttaeeaa
                                                                     3420
agaaccaatt ccttgaatgt tggaatctaa ctttttatat tgtcattatt attgttgttt
                                                                     3480
ttaaacggtt ctttgtcttt tctgttttat ttttctcaag ctgctttcag gagctagcag
                                                                     3540
aaaataacte aaagttgaag actetggaag attttgettt aacetaacte geattgatgt
                                                                     3600
attaaattta taattttagc attcccaata gatcctatca ttccttaaac ataataccct
                                                                     3660
ttgtcttgga gtagaatact aagttagagt tagtggattt ctagtttagg agaggagctc
                                                                     3720
aaaactataa tetttaacaa attgaaaaat gaaatagggt gtttteeett tttgtgeaca
                                                                     3780
cctatattac cttaagaaat ttccttccat agacagctgc ctcaaaggga aatcctcttt
                                                                     3840
aaaccgtagt tggcgcagag gtcagtccta gtcggagctt aggaggggcg gagacgctca
                                                                     3900
catcgtctga cttgagtcgc cactgattgt ggcaacagct ttgcctcatg agtcaaaaat
                                                                     3960
tggcaatttc ttttgatttt tagttgttga atttgctgtt tcaagcattt gtacatatta
                                                                     4020
gaagtetaag gagtageaag teagtgggag gaetttttea eeeetggeat tageagette
                                                                     4080
gacctcattt tccagatgca ccagctccta ttaataagtt agcaaggaaa gtgtatgtca
                                                                     4140
cgtgcaggaa cagtgaggca gggacagggg ttctgctcct tctcacttca ccaccggcac
                                                                     4200
acagettgee eetgtetttg eecceaaagg tattttgtgt etagtgteaa attggageta
                                                                     4260
ttetteactg gteettaace ttgggtttta aaaagaagge ttetetgttt gggtagegta
                                                                     4320
agagctgagt atagtaagtc ctcttccaaa gagatggcaa tatgctgggc atctacttta
                                                                     4380
aaacaaagtt gtctgatttt tgcaagagag gttaggattt tattgttctt atttcccttt
                                                                     4440
acagttetge agttecatea cagtattttt ttaaataaet caggtgtatg agaagaaatt
                                                                     4500
agaaaagaaa attaacttat gtggactgta aatgttttat ttgtaagatt ctataaataa
                                                                     4560
agctatattc tgtaaaaaaa aaa
                                                                     4583
```

```
<210> 5290
```

<sup>&</sup>lt;211> 827

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

<sup>&</sup>lt;220>

<221> misc\_feature <222> (19)...(492) <223> similar to gill10599 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

# <400> 5290 60 coggaattee ogggtogact atttogtotg otgotggtge tgtcattgog coggoggetg 120 egggaagage tggagaaagg ggeeaagget actgagagga cettggtgta ceeeetggag etgeceaagg ageceaceag tececeette eggecetgte etgaaceaga tgagaaaett 180 tgggateetg teggttaeta etatteagat ggeteeetta agatagtaee tgggeatgee 240 300 eggtgecage ceggtggggg geceetteg ceacetecag geateceagg ceagectetg cettetecaa eteggettea eetggggggg gggeggaaet caaatgeeaa tggttaegtg 360 cgettacaac taggagggga ggacegggga gggeteggge acceeetgee tgagetegeg 420 480 gatgaactga gacgcaaact gcagcaacgc cagccactgc ccgactccaa ccccgaggag tcatcagtat gaggggaacc cccaccgcgt cggcgggaag cgtgggaggt gtagctccta 540 ettttgeaca ggeaceaget aceteaggga catggeacgg geacetgete tgtetgggae 600 agatactgcc cagcacccac ccggccatga ggacctgctc tgctcagcac gggcactgcc 660 720 acttggtgtg gctcaccagg gcaccagcct cgcagaaggc atcttcctcc tctctgtgaa 780 tcacagacac gegggacece ageegeeaaa acttttcaag geagaagttt caagatgtgt gtttgtctgt atttgcacat gtgtttgtgt gtgtgtgtat gtgtgtg 827

<210> 5291
<211> 1284
<212> DNA
<213> Homo sapiens

<220>
<221> misc\_feature
<222> (38)...(692)
<223> similar to gi168747 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5291 ccagagectg getgaggtee tgeageaget gggggeetee tetgagetee aggeagtaet 60 cagetacate tteeceaett aeggtgteae ceceaaceae agtgeetttt ceatgeaege 120 cctgctggtc aaccactaca tgaaaggagg cttttatccc cgaggggtta ccagtgaaat 180 tgccttccac accatccctg tgattcagcg ggctgggggc gctgtcctca caaaggccac 240 300 tgtgcagagt gtgttgctgg actcagctgg gaaagcctgt ggtgtcagtg tgaagaaggg gcatgagetg gtgaacatet attgeceeat egtggtetee aacgeaggae tgtteaacae 360 420 ctatgaacac ctactgccgg ggaacgcccg ctgcctgcca ggtgtgaagc agcaactggg gacggtgegg cccggcttag gcatgacctc tgttttcatc tgcctgcgag gcaccaagga 480 agacetgeat etgeegteea ecaactacta tgtttactat gacaeggaea tggaecagge 540 gatggagege taegteteea tgeeeaggga agaggetgeg gaacacatee etettetett 600 ettegettte ceateageea aagateegae etgggaggae egatteeeag geeggteeae 660 catgatcatg ctcataccca ctgcctacga gtggtttgag gagtggcagg cggagctgaa 720 agggaaagcg gggcagtgac tatgagacct tcaaaaactc ctttgtggaa gcctctatgt 780 cagtggtcct gaaactgttc ccacagctgg aggggaaggt ggagagtgtg actgcaggat 840

```
ccccactcac caaccagttc tatctgggct gctccccgag gtgcctgcta cggggctgac
                                                                      900
catgacetgg geogeotgea coettgtgtg atggeeteet tgagggeeca gageeceate
                                                                      960
cccaacctct atctgacagg ccaggatatc ttcacctgtg gactggtcgg ggccctgcaa
                                                                     1020
                                                                     1080
ggtgccctgc tgtgcagcag caccatcctg aagcggaact tgtactcaga ccttaagaat
cttgattcta ggatccgggc acagaagaaa aagaattagt tccatcaggg aggagtcaga
                                                                     1140
                                                                     1200
ggaatttgcc caatggctgg ggcatctccc ttgacttacc cataatgtct ttctgcatta
                                                                     1260
gitccttgca cgtataaagc actctaattt ggatctgatg cctgaagaga ggcctagtta
                                                                     1284
aatcacaatt ccgaatctgg ggcc
```

```
<210> 5292
<211> 4119
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(1772)
<223> similar to gi3327130 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5292 tgtggcgacg gcggcagctg tggccccggc gccagcgccc ggcacggaca gcgcctcttc . 60 ggtgcactgg ttccgcaaag ggctgcgact ccacgacaac ccggcgttgc tggcggccgt 120 gegeggggeg egetgegtge getgegttta cattetegae eegtggtteg eggeeteete 180 ctcagtcggg atcaaccgat ggaggttcct acttcagtct ctggaagatt tggacacaag 240 300 tttaaggaaa ctgaactccc gcctgtttgt agtccgggga cagccagccg acgtgttccc aaggetgtte aaggaatggg gagtgaceeg ettgacettt gaatatgaet etgaaceett 360 tgggaaagaa cgggatgcag ccatcatgaa gatggccaag gaggctggtg tggaagtagt 420 gacggagaat teteatacee tetatgaeet ggacaggate attgagetga atgggcagaa 480 gccaccctt acatacaagc gctttcaggc catcatcagc cgcatggagc tgcccaagaa 540 gccagtgggc ttggtgacca gccagcagat ggagagctgc agggccgaga tccaggagaa 600 ccacgacgag acctacggcg tgccctccct ggaggagctg gggttcccca ctgaaggact 660 tggtccagct gtctggcagg gaggagagac agaagctctg gcccgcctgg ataagcactt 720 ggaacggaag gcctgggttg ccaactatga gagaccccga atgaacgcca actccctcct 780 ggccagecce acaggectea geceetacet gegetttggt tgteteteet geegeetett 840 ctactacege etgtgggace tgtataaaaa ggtgaagegg aacagcacac eteceetete 900 cctatttggg caactcctat ggcgagagtt cttctacacg gcagctacca acaaccccag 960 gtttgaccgc atggagggga accccatctg catccagatc ccctgggacc gcaatcctga 1020 ggccctggcc aagtgggctg agggcaagac aggcttccct tggattgatg ccatcatgac 1080 ccaactgagg caggagggct ggatccacca cctggcccgg catgccgtgg cctgcttcct 1140 gacccgcggg gacctctggg tcagctggga gagcggggtc cgggtatttg atgagctgct 1200 cctggatgca gatttcagcg tgaacgcagg cagctggatg tggctgtcct gcagtgcttt 1260 ettecageag ttettecaet getaetgeee tgtgggettt ggeegtegea eggaeeeeag 1320 tggggactac atcaggcgat acctgcccaa attgaaagcg ttcccctctc gatacatcta 1380 tgagccctgg aatgccccag agtcaattca gaaggcagcc aagtgcatca ttggtgtgga 1440 ctacccacgg cccatcgtca accatgccga gaccagccgg cttaacattg aacgaatgaa · 1500 geagatttac cageagettt egegetaceg gggaetetgt etactggeat etgteeette 1560 ctgtgtggaa gacctcagtc accctgtggc agagcccagc tcgagccagg ctggcagcat 1620 gagcagtgca ggcccaagac cactacccag tggcccagca tcccccaaac gcaagctgga 1680 agcagcegag gaaccacctg gtgaagaact cagcaaacgg gcccgggtgg cagagttgcc 1740

```
aaccccagag ctgccgagca aggatgcctg agactgcaga gcccttgctc cgtgagcaaa
                                                                     1800
gcctgggtgc ccaagcagcc accgcagcag cagagtacaa cctgcagaga agctgatcac
                                                                     1860
                                                                     1920
cgggcagaga tagagcgagc atgtgtgtgt gtgtgcgcgt gtgcagagga gggagtggtg
tgcctgtttg tgtgtgcatg catctgttga cactcatgat tctgaatgtt gcctgggctg
                                                                     1980
                                                                     2040
qqqqaqtacc tqtaqcacgc cagtgctgtt tcccggcctc cagacacaag gctcgaggtt
                                                                     2100
atggcagaga ctttcagctg agacctgttc ctgcaagcca gctgccttgt ctgaacagaa
cgtagtggta ggaccctagc tgggattctg gcatctgcct ccctagacct ccttccctcc
                                                                     2160
                                                                     2220
ctcctcacgt caggetgtgg agcaggagca cagcagttct ggctgttgtc caaagcatgg
                                                                     2280
qattctggag gcagccagag ccctgctgag ttcctgcttt ctgacctgga ggctgagcag
geeggagtgg atggatgetg teeagaegta geeacetgge etetgtttet tattttaaaa
                                                                     2340
ttetetgeta etgggeteag teccaggece tteettggge ttetgggaet gageatgagg
                                                                     2400
ccatagacag atctaaaaag tttccaccac cctacagaag tacacaga tacctgactg
                                                                     2460
gtgtggggta tgcctggtac tgtaatagga gcctaagaca gcacacctac cttttcagga
                                                                     2520
tttagaacct aaaattagaa agagaatccc agctgtcatt gttccttccc cagaagctaa
                                                                     2580
gagccagcct cagagcctac ccaggagctg tgaaggggca agggtcaaac tgactcactc
                                                                     2640
taccaggagg agaccaggtt gcagtggcgt aaggccccct ggtttctctg gccacactcc
                                                                     2700
                                                                     2760
aagggcacca cagtgcttgc cagtgaagga cagctgacac ccagccaggg aaaccattct
aggetttatt etgttggget tecagggeet gteetggaet tgteageate cagaetgeea
                                                                     2820
                                                                     2880
tqtcaqctat cccagtagct gagctccaag gactcacgca gagggactca aggatgggga
                                                                     2940
ctgccagggg cagttggcaa aagtccaagt agagattaca cccaacacac cattccttcc
                                                                     3000
aggagcagta ggtgggaggt ttgacccaga gaagccaatc cttgcattcc aggagtggcc
                                                                     3060
tgtgcctccc acctcttcct tcccactgcc aaaggcctgt gttgagaaag atgtcatgca
aaaggacgac ggtggccaac taaagcaagt cttccttcca ccctgtggcc tgcacttgag
                                                                     3120
                                                                     3180
ccacaaagtg tgtgtgtgtg tgtgtgcgtg tgtggtacgt gtgtgtgtgt gtggctatga
ggetgattee tgtttggatt tttgteetea egtgtateat taagetggee tttgggeett
                                                                     3240
tteettteta eeteeeetgt gaeettteet ageeteagat etgttaatte ttttggeeee
                                                                     3300
agecetytee eteactytee tetyteetty gaecagaace etygygteag acceatetee
                                                                     3360
tgtagetgte cateacactg acaggettet teetgagata teetcaggtt ttetcageca
                                                                     3420
gagagetgee tttagagtee aactgttgta egtatgteae etteaetaga aatgteecat
                                                                     3480
catcgtggga ggggagcagg gcacagggga tggtgtgcat tcagagcatt gggttggggg
                                                                     3540
                                                                     3600
cttccctgtt ccctcagccc cagtcgagag gaaagagaat cgggccactg ccagaaagag
                                                                     3660
agtcaagcaa acctggaagg gcaaatctga gagtgggaag gccaaaggcc gaggcccaga
                                                                     3720
tttagtattc actagcagcg cettegggta geaggatgat teetttteet geetgtetge
                                                                     3780
tgctggctct cttccctaag gtacaggttg gcaggaccac ctccgcctac ttctccacca
tecetageat gecagecegt teccagatea acetgecagt ggagteagge agtgeactee
                                                                     3840
tggagccaag agggaagggc agggtagaga gggtatgtcc agtagcctgg agctccatgg
                                                                     3900
tggetteatg ectecettet eccageteag gtggeeetga gggeteecte ggaacagtge
                                                                     3960
ctcaaatcct gacccaaggg ccagcatggg gaagagatgg ttgcaggcaa aatgcacttt
                                                                     4020
atagagattt tetattgetg ggaaggtgtg ttteteecae aatttgtttg tgaatattea
                                                                     4080
cttgttttat aaatgtctga cctgtcttga aaaaaaaaa
                                                                     4119
```

```
<210> 5293
<211> 614
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (615)...(187)
<223> similar to gi5262513 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5293
ttttttttta ctaaacactc aataacttta tttgcctttg getggeteet tggtgtgggg
                                                                       60
cagggtaggg tttggcaaca gcctgggctt catgcgccct ctggtggacc tcagaggcac
                                                                      120
gaactggaat ctgggccaaa cctgaggact taacagtcaa tagcctagga gggtcgcagc
                                                                      180
gctcctcagg tctgcacccc agacccaaca tcaggggacg gggcactctg ggaggaagcc
                                                                      240
etgaacetet ggeteteata etegeeegtg ttggacaace geatgttetg eegageette
                                                                      300
atctgcttca cacggtcctt gtccacttcc cgcttggtga ggatgaagag gaggatacca
                                                                      360
                                                                      420
caagggaagc cgatggccca ggccagtccc acagctttca tggggttctt gcccctcttt
ctgggaatgt attccagctc cggggatagg ggttcaggtt cctccttgcc ctctggggag
                                                                      480
etgtggettt geagggeeg ggteetgtta tgagaageet tgttagetgt ggeteetgeg
                                                                      540
agaatccccc ggaggacgcg ggcatttctc gccccccggc ccttcagcgc cgtagcagct
                                                                     600
accaccgccg ccat
                                                                      614
```

```
<210> 5294
<211> 1730
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(584)

<223> similar to gill22398 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5294
ggggcactat tatcacacca gatgaataca ctggaaaaat aatgatgctt tgcgaggctc
                                                                       60
gaagagcagt tcagaagaat atgatattta ttgatcaaaa tagagttatg cttaaatatc
                                                                      120
tettteettt gaatgaaatt gtggtagatt tttatgaete tttgaaatce etatettetg
                                                                      180
gatatgctag ttttgattac gaagatgcag gctaccagac tgcagaactt gtaaaaatgg
                                                                      240
atattetaet gaatggaaat aetgtagagg agetagtaae tgttgtaeae aaagaeaaag
                                                                      300
ctcattcaat tggcaaagcc atatgtgaac ggctgaagga ttctcttcct aggcaactgt
                                                                      360
ttgagatago aattcaagot gotattggaa gtaaaatcat tgcaagagaa actgtgaaag
                                                                      420
cctataggaa aaacgttttg gcaaaatgtt atggtggtga tattacccga aaaatgaagc
                                                                      480
ttttgaagag acaagcagaa gggaaaaaaa agctgaggaa aattggcaac gttgaagttc
                                                                      540
caaaagatgc ttttataaaa gttctgaaaa cacaatcttc taaataattg gtgggaaaac
                                                                      600
aaagaatttt cattgcaatt tgtaatatgc tgacaacaga aagaaaatta taaaatttgc
                                                                      660
ttgttacttt cagggtattc aggttcaaat aacctactag tctttcgttg aaagggagta
                                                                      720
gttagtgggt aggcaagagc ttagattttg aagccatgtt gcctgctctc aaatatctgt
                                                                      780
tecaaceact cactagtaag gtgacegtgg ceagattaac etttgtttee tetteagtaa
                                                                      840
aatcgagatt atactactac ctacataagt tgttgttgtg aagattaaat gaggtaatac
                                                                      900
gttaaatatt cagaggtgca agacacatag taagcactca attgtaacta cagttaagtc
                                                                      960
cttaaatgcc atcgaaaggt tcttagaaac tgactttaag caaaatgaca cgtagcacaa
                                                                     1020
tgttcttgaa tgatgtcatt tccttaagtg gtttgtaaca tcgatgagga aaaaaaattg
                                                                     1080
gtttatgcgt catttcattt tatttttatt tattttttga gacagagtct tgccctgtcg
                                                                     1140
eccatgetgg agtgeaatgg cacaateteg acteaetgea acetetgeet cetgggttea
                                                                     1200
agagattete etgeeteage etceattaca ggegtgeace accatgeteg getaattttt
                                                                     1260
tgtatettta gtagagtegg ggttteacea tgttggeeag getggtettg aacteetgae
                                                                     1320
ctcgtgatcc acccaccgtg gcctcccaaa gtgctgatta caggtgtgag ccaccatgcc
                                                                     1380
```

```
cagccatgtc atttcattta aagtcacaat ttccatgaat ctcaacaagt gaggacctgc 1440 tatattttgt tgcatgcagt ttttctttac ggacactaaa aggccccata cttaagattc 1500 catctacttt aagtttaaag gattttcaga atcaccttaa gtgtcaaatt tgttagcagg 1560 attaattgat atgaattcac ttattaaaca gtaaactcaa ataacataga catcaaataa 1620 cagacatctg ctctagttaa tgataaaatg tttatagatt ttatcaggtg agtagtttga 1680 aactaaatgg tttacatcta aattaagggc aggagctgtc tttcagacat 1730
```

```
<210> 5295
<211> 699
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (700)...(409)
<223> similar to gi3747107 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5295 aacacattta aaaacatttt ggcagctttt tagttgattc attaaacttg ctttattcat 60 caatattaaa gtcgggaaag taaaaaatgg taaatagcca tggataaaca ttcaaaaata 120 gcatttttga tgaccttaaa ttattttaa agccttcagt acctaaaatt ttatatatat 180 actiticatat tececectet aatactitiee tigeattaae eetggageat acacaactit 240 tgaaaaagtc aaaaaatcga qattqttttc ccaqqqtaaa qataqtttqa aqqctqqaat 300 aataaggatt tgctgaatgt atcgttgctg ctgttgttaa gatctcaagt caatccctcc 360 ctggttgctg aagccatatc accctagtgg atccatcact catcactaca ccatccqata 420 cacagggtca ccaactetca ggettecaat titttecact gaataataga teccaaaaaq 480 tggagacaac ttgtacaatt ccctctcaga aggatcacac aggcggtagc tcttcagggt 540 gtccagtggc tgtttcctgt ctatgactcc agtgtctggg tccaccgttg tcaaaataca 600 cctggggcat gccattacct ttttcacttc tacactacca attaggagtt catcccaggt 660 atcctcctca aaagcatcac agccggtcac cacaatatt 699

```
<210> 5296
<211> 1810
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (45)...(1432)
<223> similar to gi3168866 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5296
                                                                       60
ggaggcagga ggagcaagaa gtggaaacaa gagcagtgcc gtcccctcct cctccccca
tcgtgaagaa gccattgaag caaggtgggg ccaaagctcc aaaagaggct gaggctgagc
                                                                      120
cagccaagga gacagcggcc aagggccatg gccaagggcc agcccaaggc agggggactg
                                                                      180
tggtgcgcag ctcatactcc aagcccaagc ggccacaacc cagcagggaa attggcaaca
                                                                      240
tcatccgcat gtaccagage egecegggee cegtgeetgt gecegtgeag ecatccagge
                                                                      300
ctcccaaagc tttcctgagg aaaatcgacc ccaaggacga ggctctggcc aagctgggta
                                                                      360
teaacggtgc ccactegtec cegecgatgc tgtcccccag cccaggaaag ggccccccgc
                                                                      420
cagctgtggc tcctcgaccc aaggccccgc tacagcttgg gccctctagc tccatcaagg
                                                                      480
                                                                      540
aaaagcaggg gccccttctg gacctgtttg gccagaagct gcctattgcc cacacacccc
                                                                      600
cacctccacc agegecacca ctgcctctgc cegaggaccc agggaccctt tcagcagagc
gtcgttgctt gacacagccc gtggaggacc agggggtctc cacccagcta ctcgcgccct
                                                                      660
ctggcagcgt gtgcttctcc tacaccggca cgccctggaa gttgttccta cgcaaggagg
                                                                      720
                                                                      780
tgttctaccc acgggagaac ttcagccatc cctactacct gaggetectc tgtgagcaga
tectaeggga cacettetee gagteetgta teeggattte eeagaatgag eggeggaaaa
                                                                      840
tgaaagacct gctgggaggc ttggaggtgg acctggattc tctcaccacc accgaagaca
                                                                      900
                                                                      960
gegtcaagaa gegcategtg gtggeegete gggacaactg ggccaattac tteteceget
tettteetgt etegggegag agtggeageg aegtgeaget gttageegtg teeeacegtg
                                                                     1020
ggctgcgact gctcaaggtg acccaaggcc coggcctccg ccccgaccag ctgaagattc
                                                                     1080
                                                                     1140
tetgeteata cagetttgeg gaggtgetgg gtgtggagtg ceggggegge tecaccetgg
agetgteact gaagagegag cagetggtge tgeacacage cegggeaagg gecategagg
                                                                     1200
cgctggttga gctattcctg aatgagctta agaaggactc cggctatgtc atcgcctgc
                                                                     1260
                                                                     1320
gcagctacat cactgacaac tgcagcctcc tcagcttcca ccgtggggac ctcatcaagc
                                                                     1380
tgctgccggt ggccaccctg gagccaggct ggcagtttgg ctctgccggg ggccgttccg
gactetttée tgeegacata gtgeageegg etgeegetee egacttttee tteteeaagg
agcagaggag tggctggcac aagggtcagc tgtccaacgg ggaaccaggg ctggctcggt
                                                                     1500
gggacagggc ctcagaggtg aggaagatgg gagagggaca agcagaggca aggcctgcct
                                                                     1560
gagactgagg aaggaaaggg gtttgaccac teeegagget geeatgeggt gggaccacee
                                                                     1620
tgetgteegt eteetgtgge tgeeeetetg eeegeteetg atggetegee ttgtetetee
                                                                     1680
agcaagactg tgcactcett gcaggcaggg gctgggctgg atgctgctct tgtgtcccac
                                                                     1740
gtggtactta gttcaaggct gccccagcag atgcttaata aacagctctt cactttcctg
                                                                     1800
                                                                     1810
aaaaaaaaa .
```

```
<210> 5297
<211> 1247
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)...(1077)
<223> similar to gi1216313 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5297
gaaacttttg aagaattaat tgactgctct ggggggtgta ttctaggagg tttggtggat 60
gcacacacac atccagtatg ggctggtgaa agagttcacg aatttgcaat gaagttggca 120
ggagccacct acatggaaat tcaccaggcc ggaggaggga tccactttac cgtggagcgc 180
acgcgccaag ccacagagga ggagctgttc cgctccttgc agcaacggct ccagtgcatg 240
atgagggctg gcaccacgct ggtggagtgc aagagtggat atggcctcga cctggagacc 300
```

```
360
gageteaaga tgetgegegt gattgagege geeeggeggg agetggacat eggeateteg
gctacctact qcggggctca ttcagtgcct aaaggaaaaa ctgctactga aqctgctgat
                                                                      420
gacatcatca ataaccacct cccaaagctg aaggaacttg gcagaaatgg ggaaatacac
                                                                      480
gtggacaata tagacgtatt ttgtgagaaa ggtgtctttg atctcgattc caccagaagg
                                                                      540
attetteaac gtggaaaaga tatagggtta cagattaact tecatgggga tgaactecac
                                                                      600
ccgatgaagg ctgctgagct tggggctgaa ctgggagcgc aggcaatcag ccacctggaa
                                                                      660
gaagtgagtg atgaaggcat cgttgccatg gcaacggcca ggtgctctgc catccttctg
                                                                      720
cccaccacag cctacatgct gagactgaaa caacctcgag ccaggaagat gttagatgaa
                                                                      780
ggagtaatag ttgctctggg aagtgatttc aaccccaatg catattgctt ttcaatgcca
                                                                      840
atggtcatgc atctggcctg tgtaaacatg agaatgtcca tgcctgaggc cttggccgct
                                                                      900
gccaccatca atgcagctta tgcactggga aagtctcaca cacacggatc gttggaagtt
                                                                      960
ggcaaacagg gagateteat tateateaat teateeegat gggageattt gatttaceag
                                                                     1020
ttcggaggcc atcatgaatt aattgaatat gttatagcta aaggaaaact catctataaa
                                                                     1080
acatgataga tttgaaaaga gaagactttt tgactatatg aaataagtca atatagttat
                                                                     1140
attaaaagtt aaaacacctt aatatttaca agaattatat cacttaaacc taaatgtact
                                                                     1200
tcaatgtctt tttaagtcac tcaaaaaacc caagggatag atttatt
                                                                     1247
```

```
<210> 5298
<211> 1689
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1692)...(1434)
<223> similar to gi5788103 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5298
tcaagcactg aagacgcaaa actgaaacaa caggcaaggg cgagtggaac gtgggatggg
                                                                       60
gagcaaaagg ctggaaggag gggggctggg cccacacctg gaagaaccca catccttgca
                                                                      120
gcctccggtg gctgcaacat cttggcccct gcagatcttt tcagaggtcc ggcacaatga
                                                                      180
ctccacagag ggctgactgg ttccatgatg cttaagaggt taggaagctt gtaggaggca
                                                                      240
egeetgaett gecaeteeet eeacecagge etgaetatet gaggaecaat teacacacet
                                                                      300
ggagccccga gtagcagcct gaaggaatgc taaggaggta ggtgagggag tggggggcag
                                                                      360
gesettgese ceatttettg attgtataas astteattaa aataaaatsa egeagtgesa
                                                                      420
tettttatta gaeattttaa taecatatea aaacaeettg aetaatgaag aaagetttte
                                                                      480
tcccaagctt tgaacatttt tttaaacatt ttataagttt ttttttgtat tttaatatat
                                                                      540
aaatacagaa acctatcttg catgggctga tgccacgtgt gaacatcaat ggctaaaatg
                                                                      600
tteteaaaca tagtgeetga aaacaggggt agetgtacat atttettagt aagtetttt
                                                                      660
ttgtttaagt tttctgaaaa aaaaaatcca cgagggccta agaataatgt tcaggcattt
                                                                      720
ttgcaggaca cttgtgattg ttaaatcctc tgaactgacc ggaaccagga ggaaagaagg
                                                                      780
gaaaagagat gggatcagta ggaagaaagt totcaatggg ttgttttttg gcaatgaagt
                                                                      840
caagatatta gggtctcaag gggagaaaag agcaaaaaac cagccagaaa aatagaggga
                                                                      900
aaaaaccaaa caaacccaaa gtagagaagt tggtggtgga gagggccagt tggggcaggg
                                                                      960
gaagagaccg tgtgctcgcc cgccgtcaga aggctggcag cgaggcctta gctgtgttcg
                                                                     1020
tctgtcactg agtgggttat ggctgggcag caaacagcaa gctgtaaaca tcacgaggga
                                                                     1080
aaacaccagt cgacactaga ctttttttt atataatttt tttttgtaaa cactttaaag
                                                                     1140
acagacccac aatgcettte aaagatgaaa aagaaaatge cettteeete etgggetgag
                                                                     1200
gggtgagggg aaggatagca gttgattcat tcttctctca aacttgctct catccaattt
                                                                     1260
```

```
ggtgtcctca gggaggaagg gagaaccatg atctggaagt cagtgcagaa ggggtgccct
                                                                     1320
gttcccgctg gtgtcccaag ctcagctctg ccccagggtc cggtgagcct cctccctgga
                                                                     1380
                                                                     1440
gcaggggcgc tetgteeett tgagaggagt cagcaagcaa geeegeaggt cagteegeag
ggtgttccgg acaagatctg ttcacttcaa accacgagtc tatgcagctt ttgtgataga
                                                                     1500
tgcacaggca gggcagcctg gctatcgtgt ccccctgcag cagctcctcc aggcagatca
                                                                     1560
cacactcacc cgcgtcttta gtcagcacat catcgttgta ggagaggcga ggtttgctca
                                                                     1620
aacacattat aaagtgcatt tccatctcgt caaaagccac agacttggag caaatggggc
                                                                     1680
acttgaacc
                                                                     1689
```

```
<210> 5299
<211> 1460
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1252)...(353)
<223> similar to gi1293835 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
· <400> 5299
ttttttttt ttggccaaac agattggtca ttattgtaca catagctgga agggagggt
                                                                      60
ggtcccgggg taaggacagg gctgcccaat atttgggggg aggaagggac tcttcttcca
                                                                      120
aatgggettg teegggaace ggggteeegg ggagetggge geetggteea catggaeeee
                                                                      180
ctccacctcc ccacatacgc tgtggaagaa gggcaggagt gagaaatgct gggggaggac
                                                                      240
gaccettigg telgagatgt ggaggtgate ataacagtte eegecegetg getgttitgt
                                                                      300
tgactttgga gaggccttcc cggaacccag agtccgtcat tacttgctcc atctgaacat
                                                                      360
ceteetegte eteetgggge agetgeaggt aegggttgtt eeetgtggge tggaacttgt
                                                                      420
agcccgtgag cacgaagaag gccagggtgg agccctccac caagagctgg tacagccact
                                                                      480
gccactgaaa gggcacagcc acctgcagca ggatggcgat gatgcgggtg aagtagacgt
                                                                      540
agcagatgac catgacatag taatgccgga acagcttcag cttggccagg ttcactgcca
                                                                      600
cettecegte tgtgecagae geateetgga gatgeeggat ggaecagaet aeggggaaca
                                                                      660
ggatggcacc acagcagatg aggtccacca ggaacaaaat ctccttccac agcacgtagt
                                                                      720
cgctggcgcc ttcctcgcgg gactcgatga tgatgtaggc cacgttggcc aggacctgca
                                                                      780
tggggatcac gatcccaaag accttcttct ccttatccga caggacgtac ttgatgaagg
                                                                      840
cccagcctga gccaatcagg gcgatggtga tgaagaggag ggcgcccttc agcaggtgtg
                                                                      900
cgatgtagta catgacggca aggccttcga tggggtggcc ctggctgttg atgaagtagt
                                                                      960
agttgatgct gtggaagagg agagagatgc tcttggtgaa ggccaaggcc gccatgagcc
                                                                     1020
agtggatett gaagaegetg taegtgttee tgeagaggat ggacaeceag aagatgeeag
                                                                     1080
cggccaggaa gcaggcggac atgaccatgt agagcttgaa aaggggcatc tccgctgccg
                                                                     1140
acaggaagee ateggggtte tteteeegga teateacegt gatgtegaat ggatgeteet
                                                                     1200
ttcctggcac tgaattgttg cagttgtgga agttcaggct gtactggcct tcttccgcct
                                                                     1260
gagageegat caeeaegtgg aaaetgaagt tgtaggagtt gttgaggtgg etcaggeeca
                                                                     1320
acaccaggte ettgteette ceactaggae eetgaateae tgegggtgtt gaettggget
                                                                     1380
tgctggctgc agaggtccct ccgccatcca ccttgcgggg gactgtggcc tgtggcttcg
                                                                     1440
ggaattccac cgcactggac
                                                                    1460
```

```
<210> 5300
<211> 2335
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(976)
<223> similar to gi2622298 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5300
gatettttga tttcatacat ctagaccett ttggaacate agtgaattat etagattetg
                                                                       60
cattcagaaa tataagaaac cttggcatag tgtcagtgac ttctacagat atcagttctt
                                                                      120
tatatgccaa ggcacagcat gttgcccggc gtcactacgg atgtaacatt gtccgaactg
                                                                      180
aatattacaa ggaactagca gccagaattg ttgtagctgc agtggcaaga gctgcagccc
                                                                      240
gatgcaacaa aggcatagaa gtactgtttg cagtggctct ggaacatttt gtgttggtag
                                                                      300
ttgtgagagt tttgagggga cctacttcag cagatgaaac agccaagaag attcaatacc
                                                                      360
tgatccattg tcagtggtgt gaagagagaa tttttcagaa ggatggtaat atggtagaag
                                                                      420
aaaacccata tagacagctg ccttgtaact gtcatggaag catgcctgga aagacagcaa
                                                                      480
tagaacttgg acctetgtgg teaagtteee tttteaatac tggatteete aaaagaatge
                                                                      540
tatttgaatc tetteaceat ggtttggatg acatteagae eetaataaag acattaatet
                                                                      600
ttgaatcaga gtgtacgeet caaagtcagt tttcaattca tgcatettca aatgtcaaca
                                                                      660
agcaagaaga aaatggtgta tttattaaaa ctacagatga caccacaaca gataattaca
                                                                      720
ttgcacaagg aaagagaaaa agtaatgaaa tgatcacaaa tttaggcaag aagcaaaaga
                                                                      780
ctgatgtcag tactgaacat cctccctttt attacaacat tcacagacac agcattaaag
                                                                      840
gaatgaatat gccaaagtta aaaaagtttt tgtgctattt atctcaagca ggctttcgag
                                                                      900
taageegaae teattttgae eeaatgggtg taegeaeaga tgeaeetetg atgeagttta
                                                                      960
aatctateet tttaaagtae ageaceeeca eetacaetgg aggacagtea gaaageeatg
                                                                     1020
tccagtcagc atctgaagat acagtaactg aaagagttga aatgtcagtg aatgacaaag
                                                                     1080
cagaagcaag tggctgcaga agatggtaaa cgtagagaag aattggttct caggtgtctg
                                                                     1140
tatagatggc ctaatagttc tctataccaa ctgtagttct ttttctgttc tttcaattca
                                                                     1200
gtagagtaaa aataaaaaac agtgtcattt tcattcagaa actgagcagt ttctaactta
                                                                     1260
gctggtttgg gagctttgct ttccaagttt ttttttgttt taaggcaaac ttaaaatttt
                                                                     1320
aatggaaaca tttcatatga agccaagtct cactgagatc accctactgc ttaataattc
                                                                     1380
agaaaatttt cacatgcaaa gtgtttggaa ttttatgtat gttatgaaag ccatctttta
                                                                     1440
caattettaa teacatetet geetaaaetg atteatgatg titatgitti cetgittgta
                                                                     1500
gtgtacaaaa tgaagctgaa ggctcacatg ttaaaatgac cctgaataga ataggaagaa
                                                                     1560
caatgttctt acaggtcata atgtatttca caattaaaaa actaaaatat gtacccattt
                                                                     1620
ttaagaaatc atacttetet eeacattgat etttteattt ettaetaget tttaagaaat
                                                                     1680
taaatacttg cctgagatag aaatacttta tttttgtaac tttaaggtct aaatgactaa
                                                                     1740
acttcaaagt aagattttgt cagaataaat tgagaccatt aatctaatat aatacttgtt
                                                                     1800
catgagcact gaaatcctga agaggagaga tttggttata aattaaaaag gttgggtgat
                                                                     1860
cttaagtgcc tcagttaatg cacgtacagt attcatttgg ttggttgtac tacctctcag
                                                                     1920
aagtaaaatt tgtcacctta tggaatgaga gtttttgggt ttgggggttg tttttttgtt
                                                                     1980
gttgcttggt ttggtatttt tggttttgtg tgtatttgta taaattttct gtataattag
                                                                     2040
cccaggctga tgtaactata aaaattagtt gaaaaaaaaa atattgtttc cttaatggaa
                                                                     2100
ttctcacttc atttgaatat aagattttgg atgaaaggat ttggtataaa gtttgggttt
                                                                     2160
ttgtctcaag gatttgatcc atatttatcc ctaaatattt cttaagggat gtaacttttt
                                                                     2220
ataaccatta agtgggggga agggggtgga gggggtggta tgtactcata tttattaqtc
                                                                     2280
gttaacatct ttoottgtot agcattattt ctgagtataa cgatcatctt aagco
                                                                     2335
```

```
<210> 5301
<211> 872
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (873)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (5) ... (727)
<223> similar to gi212260 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5301
gcacctgcgg caggacaaag agcatgacgt ctcgctggag atccaggatc tgcggctgga
                                                                       60
ggactatggg cgttaccgct gtgaggtcat tgacgggctg gaggatgaaa gcggtctggt
                                                                      120
ggagctggag ctgcggggtg tggtctttcc ttaccagtcc cccaacgggc gctaccagtt
                                                                      180
caacttccac gagggccagc aggtctgtgc agagcaggct gcggtggtgg cctcctttga
                                                                      240
gcagetette egggeetggg aggagggeet ggaetggtge aaegeggget ggetgeagga
                                                                      300
tgccacggtg cagtaccca tcatgttgcc ccggcagccc tgcggtggcc cgggcctggc
                                                                      360
acctggcgtg cgaagetacg gccccgcca ccgccgcctg caccgctatg atgtattctg
                                                                      420
cttcgctact gccctcaagg ggcgggtgta ctacctggag caccctgaga agctgacgct
                                                                      480
gacagaggca agggaggcct gccaggaaga tgatgccacg atcgccaagg tgggacagct
                                                                      540
ctttgccgcc tggaagttcc atggcctgga ccgctgcgac gctggctggc tggcagatgg
                                                                      600
tagogtocgo taccotgtgg ttcaccogca toctaactgt gggcocccag agcotggggt
                                                                      660
cegaagettt ggetteeeeg accegeagag eegettgtac ggtgtttact getacegeea
                                                                      720
gcactaggac ctggggccct cccctgccgc attccctcac tggctgtgta tttattgagt
                                                                      780
ggttcgtttt cccttgtggg gtggagccat tttaactgtt tttatacttc tcaatttaaa
                                                                      840
ttttctttaa acattntttt actatttttt gg
                                                                      872
```

```
<210> 5302
<211> 2454
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2057)...(1052)
<223> similar to gi4378887 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5302
                                                                       60
aaaattttca ttaatcaaac tccgtaaaga aaactttcca acagccagga tatggaggtt
gttttacccc tttttcccct taaaattttt ttttttccct aaagecttaa atttctgtag
                                                                      120
                                                                      180
ggaggttgtc ccaatatgtc cccccccaa aataaagttc ctttccaaaa attcccaagt
                                                                      240
aggttttaat tcgqcccct ataaggaaaa aaatattacc ttgcaagccc gggtaaaatt
tggcccccc aaggattctt taaaacggcc ccccttttt ttttttttc catccataaa
                                                                      300
catatgtctt tattctcttt ctgtacatat gggcaatgat aaagcttaaa gatgcatgtc
                                                                      360
ctaagaaata tgcaaaaaca atgaatttac ataaataatt tatacttcag aaaattaaag
                                                                      420
ttgaaaaata ttttccacat tattagagtt cacagtattt aaatcaagct ttcccactta
                                                                      480
tactccagac tatattgtct tagcagagag tgataaaatc taatcaggaa taaaatgatc
                                                                      540
aagtttctgt ttttattcag tgcacgagta gacgctattt cagtatcagg ccgcgccaag
                                                                      600
tgtcgaggct gcagcctctc atcctgaccc ttcccctcct gagtggctgt gacccagcag
                                                                      660
aggtcactgg cgtggaatgg ttacagcgtc accaaaccac tccacggtgg acacattcaa
                                                                      720
ccgagcggta acatctggtg gtctgatgcc tcatttccaa gtaatacttt ttatagccct
                                                                      780
gaaaatggaa accttggcat ctaaacaaac agagctgaac atgtgaacac taggacaagg
                                                                      840
cactgtacta tggggtttgg tttctttatg ggaaaggtgt ttgcatagat tgctagctat
                                                                      900
ttagtgtgca ggaaaacaga gccccagcg tgcatggctt tgtgaggggt gaagctgcat
                                                                      960
ggtgetecet cagececaag agagegeagt eteteattet ceagececag eettgtggge
                                                                     1020
tgtcccgctg gtgctgtcct ttagaacccc tacaggagag ttttttgctc aaaaagctgc
                                                                     1080
aggicaaaac ggacccagac cicccggtg gggaccicat gcagcagcag teggegggte
                                                                     1140
atagggeett tgettteetg ttetgttega atttttgeea etggaattte agtacgaece.
                                                                     1200
aggaaatcat ctggtgaaaa ctggtctctg tcaaacaggg tgagacacag cacgtcttgg
                                                                     1260
tagagateet taataaagaa etggeagtta aaatteeact tgggattgag tgtgteetgg
                                                                     1320
atggtcctgg tggtgtagct ctgggagccc atgctgattt cacagtatgg gttgctcttt
                                                                     1380
ccatttggtt tgcaggcttt taattctgta gcttcaatga catgcaccat caggcgccca
                                                                     1440
atgootgaag tottttggga gegggettgg taagetttet caegettett etteteggtg
                                                                     1500
tegatgtact geteagaege egeettgate ttetgeacce aggeggteet eteattaatg
                                                                     1560
ttgtctgttc ggagggtgta gacccgatca atgtgggaaa tgtgggaagac aggctcatcg
                                                                     1620
ctggaagggt ctgtgggcag tttcaccaag acttcattca ggaaaatggg cgttttatac
                                                                     1680
attitigaatt gagcattigga citicgagctig aaaagtitict cagagccaga ggaaacagca
                                                                     1740
aactgcttga ccatgtaggt aagaagcagg aagtcattga agaggaatcc gtgcagttcc
                                                                     1800
ttgttgctct tggtcttgta taatttccca ctgtgtaaga gcttccgggg ccccaggcag
                                                                     1860
ttggtgagag agttgaaaat aagttgctcc gcgaggcctt cacactgcac gtgcgcctgg
                                                                     1920
atecacteca gteggteega gttttccttc tecegaacte ceteatteac ttgagageac
                                                                     1980
ageteetetg ceegetegag ggecagettt agggaggaat ggtetgeatg geteteeggg
                                                                     2040
gtgttctcca gaatctggaa aagagtgggc agtgtcacat gggggagctg cgtctctcac
                                                                     2100
etgeceacet ggacettege aggacegete etceaacece atgttatgga etgettecat
                                                                     2160
gccctggaaa cgcggcggtg aacaagacga cactttccgc ccttgagaaa ctcgtactcc
                                                                     2220
cacaagttct tggggacaca gggacaggta acgctgctgt gacaaggtga cagtgctaaa
                                                                     2280
cggatcaagt gctctgaact gtgtgggtct ctggttgctc tccgactggc tcccggtaat
                                                                     2340
aggegggage etecegaete etteegaaat ttaageeatg taagggtgeg eeeteetgta
                                                                     2400
taaactggct gcagctgtgg taagtgtgaa cttgctgaat agcaatggtt cata
                                                                     2454
```

```
<210> 5303
<211> 1751
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (50)...(796)
<223> similar to gi4102980 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5303
taagaaaaca aactttetee gttetatgae tgetetettg gaeceagete agattgagga
                                                                        60
acgagacaga cgacgacaaa aacaattaga gcatcagaaa gccatcactg cccaggtaga
                                                                       120
agagaagcgc aggaagaaac aactggagga agagcaaaga aagaaggaag aacaagaaga
                                                                      180
ggagettege ttageacagg aacgtgaaga gatgeagaaa cagtatgaag aagacataet
                                                                       240
                                                                       300
taagcaaaaa caaaaggaag aaatcatgac tctcaagaca aatgagctat tccagacaat
gcagcgagca caggaactgg cacagagact aaaacaagaa caaagaatcc gagaattggc
                                                                       360
gcaaaaggga catgacactt ctagactgat taaaaatctt ggtgttgata caatacaaat
                                                                       420
ggaatataat gcatctaaca tttcaaattc aagacatgat tctgatgaaa tcagtggtaa
                                                                       480
aatgaataca tatatgaatt ctacgacttc ttctaagaag gatactggtg tgcaaacaga
                                                                       540
                                                                       600
tgacttaaat ataggaatat tcaccaatgc agaatcacat tgtggatcat taatggagag
ggacatcaca aattgttcat ctcctgagat ttcggcagaa cttattggac agtttagcac
                                                                       660
                                                                       720
caagaaaaac aagcaagaac taactcagga taaaggagcc agcttagaaa aagaaaacaa
                                                                       780
ltoggtgtaat gaccagtgta atcagttcac aagaatagag aaacaaacaa aacacatgaa
gaaatateet aaaaggeetg attggaatat aaataageea eetaaaaggt atatteeage
                                                                       840
                                                                       900
atcagaaaag taccctaaac agcttcaaaa gcagagagaa gaaaaaaaag taaggaggca
gatggaattg cttcatttgg tagaaaaaaa taatcctggg cacctctctc aaaacagagg
                                                                       960
catttcacca gaaatttttc attcatctca tcaagaaacg gagtcaaagt tgaggtggca
                                                                      1020
                                                                      1080
totagtoaaa aaggaagaag agcototgaa tattoattoa ttoagoaagg aaaggtotoo
atcatcacca gttccagtag tgaaaaacag aacccaacaa actcaaaata cattacattt
                                                                      1140
accactaaaa aacagtagct atgagagaga gaatttgatc tcaggaagta atcaaacaga
                                                                      1200
attatcatct gggatttctg aatcatccca ttttattccg tatgttcgaa caaatgagat
                                                                      1260
ctattacett gatecegatg caccattgte tgggeettea acccaggace etcagtacea
                                                                      1320
aaattcacaa gactgtggcc aaaaacgaca gctatttgat tctgactgtg tcagggatcc
                                                                      1380
acttettaat cetaacatgg tgaaaaatag ggategaeag caageaatee ttaagggaet
                                                                      1440
ttcagaactg agacagggcc ttctccagaa gcaaaaggag ttggaaagta gtctcctgcc
                                                                      1500
ctttagctga aaatcaagaa gagagttttg gttcttcatt ttaaatgtag aaaatcaaat
                                                                      1560
cetteacatt tgatttgtgt ettecaaatt ataaaatgtg etcaetgget caactgtatt
                                                                      1620
tttcaaatag cctagattta cttattttt taaatgctca ttaaaaactt gtatactatg
                                                                      1680
tagtaaaatg ctgtacttgt tctatacaat aaaacagata cttcttttgt aaaagcttag
                                                                      1740
tagtaaaaaa a
                                                                      1751
```

```
<210> 5304
<211> 1110
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(649)
<223> similar to gi3327100 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5304
ctccaaggag catctctgta tgacttgctc ggcatggaag tagagttgag ggaaatgaga 60
acagaagcca ttgccagacc tctggaaata aacgagactg aaaaagtgat gagaattgca 120
```

```
180
ataaaagaga ttttgacaca ggttcagaag actaaagacc tgctcaataa tgtggcctct
gatgaagcta atttagaagc caaaatcgaa aagagaaaat tagaactgga aagaaatcgg
                                                                      240
                                                                      300
aagcgactag agactctgca gagtgtcagg ccatgtttta tggatgagta tgagaagact
gaggaagaat tacaaaagca gtatgacact tatctggaga aatttcaaaa tctgacttat
                                                                      360
ctggaacaac agcttgaaga ccatcatagg atggagcaag aaaggtttga ggaagctaaa
                                                                      420
                                                                      480
aacactetet geetgataca gaacaagete aaggaggaag agaagegeet geteaagagt
ggaagtaacg atgactcgga catagacatc caggaggacg atgaatccga cagtgagttg
                                                                      540
gaagaaaggc ggctgcccaa gccacagaca gccatggaga tgctcatgca aggaagacct
                                                                      600
                                                                      660
ggcaaacgca ttgtgggcac gatgcaaggt ggagactccg atgacaatga ggactcggag
gagagtgaaa ttgacatgga agatgatgat gacgaggatg acgatttgga agacgagagc
                                                                      720
atttctctct caccaaccaa gcccaatcga agggtctgga aatctgaacc cctggatgag
                                                                      780
                                                                      840
agtgacaatg acttctgacc cttttgccaa gggaccctgg cagattaaaa ccctcagact
tgtaggtaaa tgggaactta gaaggttagg aaggtaaccc ctgttttgtt tactaagctg
                                                                      900
gctggactca tgatcactga agcaatactt atttctgctt tagcctccta tgtttgcatt
                                                                      960
ccatgaagct taaataagaa ttgaagcaaa tccctaagat ttatttttt ccaccttatt
                                                                     1020
tatcttctaa aacttgagga atgcatgtgt tcttagtgat tcacatccac gggacaaaaa
                                                                     1080
                                                                     1110
ctcaagaaga aataagagct gacgccacac
```

```
<210> 5305
<211> 1925
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1440)
<223> similar to gi5911316 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5305 atggcctgga acaccaacct ccgctggcgg ctgccgctca cctgcctgct cctgcaggtg 60 attatggtga ttetettegg ggtgttegtg egetaegaet tegaggeega egeeeaetgg 120 tggtcagaga ggacgcacaa gaacttgagc gacatggaga acgaattcta ctatcgctac 180 ccaagettee aggacgtgea egtgatggte ttegtggget teggetteet catgacttte 240 etgeageget aeggetteag egeegtggge tteaacttee tgttggeage etteggeate 300 cagtgggcgc tgctcatgca gggctggttc cacttcttac aagaccgcta catcgtcgtg 360 ggcgtggaga acctcatcaa cgctgacttc tgcgtggcct ctgtctgcgt ggcctttggg 420 geagttetgg gtaaagteag ceceatteag etgeteatea tgaetttett eeaagtgaee 480 ctcttcgctg tgaatgagtt cattctcctt aacctgctaa aggtgaagga tgcaggaggc 540 tecatgacea tecacacatt tggegeetae tttgggetea cagtgaceeg gateetetae 600 cgacgcaacc tagagcagag caaggagaga cagaattctg tgtaccagtc ggacctcttt 660 gccatgattg gcaccetett cetgtggatg tactggeeca getteaacte agccatatee 720 780 taccatgggg acagccagca ccgagccgcc atcaacacct actgctcctt ggcagcctgc gtgcttacct cggtggcaat atccagtgcc ctgcacaaga agggcaagct ggacatggtg 840 cacatecaga atgecaeget egeaggaggg gtggeegtgg gtacegetge tgagatgatg 900 ctcatgcctt acggtgccct catcatcggc ttcgtctgcg gcatcatctc caccctgggt 960 tttgtatacc tgaccccatt cetggagtec eggetgeaca tecaggacac atgtggeatt 1020 aacaatetge atggeattee tggeateata ggeggeateg tgggtgetgt gaeageggee 1080 tecgccagee ttgaagteta tggaaaagaa gggettgtee atteetttga ettteaaggt 1140 ttcaacgggg actggaccgc aagaacacag ggaaagttcc agatttatgg tctcttggtg 1200

```
accetggeea tggecetgat gggtggeate attgtgggge teattttgag attaccatte
                                                                1260
                                                                1320
tggggacaac cttcagatga gaactgcttt gaggatgcgg tctactggga gatgcctgaa
                                                                1380
gggaacagca ctgtctacat ccctgaggac cccaccttca agccctcagg accctcagta
ccctcagtac ccatggtgtc cccactaccc atggcttcct cggtaccctt ggtaccctaa
                                                                1440
                                                                1500
gctcccaggg caggtgagga gcaggctcca cagactgtcc tggggcccag aggagctggt
gctgacctag ctagggatgc aagagtgagc aagcagcacc cccacctgct ggcttggcct
                                                                1560
                                                                1620
caaggtgeet ecaceeetge ecteeeette ateeeagggg gtetgaetga gaatggagaa
                                                                1680
ggagaageta caaagtggge atccaageeg ggttetgget geagaagtte tgeetetgee
                                                                1740
tggggtettg gecacattgg agaaaaacag geteaaagtg gggetgggae etggtgggtg
aacctgaget eteccaggag acaacttage tgecagteac cacctatgag getettetae
                                                                1800
cccgtgcctg cacctcggcc agcatctcct atgctccctg ggtcccccag acctctctgt
                                                                1860
1920
                                                                1925
```

```
<210> 5306

<211> 2679

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (269)...(908)

<223> similar to gi3786433 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 5306
                                                                       60
acgtttttag aagacagcta ccaagtatat atttcggggt tgtagagttc aaataataaa
tototagott cataatgttt ctaagottot otocottita aaatttttgg tattagggat
                                                                      120
ggattgataa ctttaatgga ccaagtggtc tctttattgc ggtaagtaaa ccttttgatt
                                                                      180
tatttaatat tetatacatt tttetgtttt ttgtatatet ttaaatatat atacaetatg
                                                                      240
gcttatatat cttaaggtgt tgtttttaat ttcaacaaag gcagggaaag gaattcttcg
                                                                      300
                                                                      360
aacaatacgt gcctccaaca atgcccttgc agatcttgtt cctgtagatg tagttgtcaa
catgagtett geggeageet ggtatteegg agttaataga ceaagaaaca teatggtgta
                                                                      420
taattgtaca acaggcagca ctaatccttt ccactggggt gaagttgagt accatgtaat
                                                                      480
ttccactttc aagaggaatc ctctcgaaca ggccttcaca cggcccaatg taaatctaac
                                                                      540
ctccaatcat cttttatatc attactggat tgctgtaagc cataaagccc cagcattcct
                                                                      600
gtatgatatc tacctcagga tgactggaag aagcccaagg atgatgaaaa caataactcg
                                                                      660
                                                                      720
tetteacaaa getatggtgt ttettgaata ttteacaagt aattettggg tttggaatae
tgagaatgte aatatgttaa tgaateaaet aaaceetgaa gataaaaaga eetteaatat
                                                                      780
tgatgtacgg cagttacatt gggcagaata tatagagaac tactgcttgg gaactaagaa
                                                                      840
gtacgtattg aatgaagaaa tgtctggcct ccctgcagcc agaaaacatc tgaacaagtt
                                                                      900
                                                                      960
geggaatata egitatggtt ttaatactat eetigtgate eteatetgge geatittitat
tgcaagatca caaatggcaa gaaatatctg gtactttgtg gttagtctgt gttacaagtt
                                                                     1020
tttgtcatac ttccgagcat ccagcactat gagatactga agaccaagga ttcagcatta
                                                                     1080
gaacatctat acatatggtg atctaaatgt acaaaatgta aaatgtataa gtcatctcac
                                                                     1140
                                                                     1200
tttttgtcaa gacattaaac catcttagat cggagtgtga agtaaattat ggtatatttt
atgtaacatt ttaatgttta tgctcataaa acttagtgaa cacactgtgt tatgccagct
                                                                     1260
caaatctaca gtagccacca aaaccatgac ttaatatttt gagccctaga agaaaggggt
                                                                     1320
gtgctgagga caagagtggg gaaataggaa cactgaccag tataactgtg caattctgga
                                                                     1380
acatattaat taaaataata tgccttaaca tatagtgaat ttctaattct aatgttcagt
                                                                     1440
```

```
gcaatggaag acatttattt ggacagtaat actagcaaag ttggtagata tttgattctt
                                                                     1500
cattttttgt tttttcatt agttgaagtg ggttttagtt ttgtttaaaa ttataaccag
                                                                     1560
cgtattttca catcattctg taagttaaat gatatcaaac atgaaagaga tgttctcatt
                                                                     1620
titctttttc tgattaaacg tctgatgcat atcatttttc tataagtaat cagttgcttt
                                                                     1680
                                                                     1740
taaaatcaga aggctatatt attctaatga ccctattcga tctaaatggg tttgagaatc
                                                                     1800
catatcagca acatacgtgt tttttgacag aaagtgaaaa caaattccgt aaaactgtta
gtatcaaaaa gaataggaat acagttttct tttccacatt atgatcaaat aaaaatcttg
                                                                     1860
tgagattgtt tatgttttga agcaggagga tttcttgaga tttgatggaa gtgggagttg
                                                                     1920
                                                                     1980
ggaaggattc accatacttg tgttctcctc cctttataaa ttttattcat aggactttta
aaaggettgt getatettte cagtgaaaac tgaaagtgea ttattatgga agaatgtatt
                                                                     2040
tgcaggtagt aatagcatta aaaaatatac tcgtgtgtaa acacatacta attttgacct
                                                                     2100
                                                                     2160
tgaaagatga attccttcaa gaaaaataaa ataatgctta agataatgtg tacgaaatta
                                                                     2220
aataaaggac tttatttaca tactacataa ggtagcaaac tgttgaatga gtttgaaggt
atcacttatt ttttatgcat gtgattttag ctttagaaag aaatgcgtta tagaaacaag
                                                                     2280
                                                                     2340
taatagcaag aaaattgatg tatattttaa tgatacatta aaattccctt ttaatcataa
tagttaactc tacttactgt tttaacatac atttgattta acaaattgtt cagcataaca
                                                                     2400
                                                                     2460
cttctaatta agtttatcaa gttgtactgt attagataat cagcagtgta tctggagtat
                                                                     2520
gtttaaagag aacagttcgc aatacaaaaa gttacatgga gctttacatc ttaactttct
ttgtcaattt aaatgcaatg gataaaaagg ttattttgct attgtgaaaa actaattgta
                                                                     2580
aaggaaatca cctactttca tgcaggtgta taatcttgaa aaggaaaaat gcttccatgt
                                                                     2640
                                                                     2679
tgaagccaga ttttctgtag taaaactttt aaatattat
```

```
<210> 5307
<211> 2119
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (4)...(2021)
<223> similar to gi4868122 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5307
tcaaacgaag ggagcggagc aaggaggaga aggtgcctga atgggaaccc cccgaagcgc
                                                                       60
ctgaaaagga gagacaggag gatgatgtcc cagctggagc tgctgagtgg gggagagatg
                                                                      120
                                                                      180
ctgtgcggtg gcttctaccc tcggctgtcc tgctgcctgc ggagtgacag cccggggcta
gggcgcctgg agaataagat attttctgtt accaacaaca cagaatgtgg gaagttactg
                                                                      240
gaggaaatca aatgtgcact ttgctctcca cattctcaaa gcctgttcca ctcacctgag
                                                                      300
agagaagtot tggaaagaga cotagtactt cototgotot gcaaagacta ttgcaaagaa
                                                                      360
ttettttaca ettgeegagg ceatatteea ggttteette aaacaactge ggatgagttt
                                                                      420
tgcttttact atgcaagaaa agatggtggg ttgtgctttc cagattttcc aagaaaacaa
                                                                      480
                                                                      540
gtcagaggac cagcatctaa ctacttggac cagatggaag aatatgacaa agtggaagag
atcagcagaa agcacaaaca caactgcttc tgtattcagg aggttgtgag tgggctgcgg
                                                                      600
cagecegttg gtgeeetgea tagtggggat ggetegeaac gtetetteat tetggaaaaa
                                                                      660
gaaggttatg tgaagatact tacccctgaa ggagaaattt tcaaggagcc ttatttggac
                                                                      720
attcacaaac ttgttcaaag tggaataaag ggaggagatg aaagaggact gctaagcctc
                                                                      780
gcattccatc ccaattacaa gaaaaatgga aagttgtatg tgtcctatac caccaaccaa
                                                                      840
gaacggtggg ctatcgggcc tcatgaccac attcttaggg ttgtggaata cacagtatcc
                                                                      900
agaaaaaatc cacaccaagt tgatttgaga acagccagag tctttcttga agttgcagaa
                                                                      960
```

```
ctccacagaa agcatctggg aggacaactg ctctttggcc ctgacggctt tttgtacatc
                                                                     1020
attcttggtg atgggatgat tacactggat gatatggaag aaatggatgg gttaagtgat
                                                                     1080
ttcacaggct cagtgctacg gctggatgtg gacacagaca tgtgcaacgt gccttattcc
                                                                     1140
                                                                     1200
ataccaagga gcaacccaca cttcaacagc accaaccagc cccccgaagt gtttgctcat
gggctccacg atccaggcag atgtgctgtg gatagacatc ccactgatat aaacatcaat
                                                                     1260
ttaacgatac tgtgttcaga ctccaatgga aaaaacagat catcagccag aattctacag
                                                                     1320
ataataaagg ggaaagatta tgaaagtgag ccatcacttt tagaattcaa gccattcagt
                                                                     1380
aatggtcctt tggttggtgg atttgtatac cggggctgcc agtcagaaag attgtatgga
                                                                     1440
agetacgtgt ttggagatcg taatgggaat ttcctaactc tccagcaaag tcctgtgaca
                                                                     1500
aagcagtggc aagaaaaacc actctgtctc ggcactagtg ggtcctgtag aggctacttt
                                                                     1560
teeggteaca tettgggatt tggagaagat gaactaggtg aagtttacat tttatcaage
                                                                     1620
                                                                     1680
agtaaaagta tgacccagac tcacaatgga aaactctaca aaattgtaga tcccaaaaga
cetttaatge etgaggaatg cagagecacg gtacaacetg cacagacact gaetteagag
                                                                     1740
tgctccaggc tctgtcgaaa cggctactgc accccacgg gaaagtgctg ctgcagtcca
                                                                     1800
ggctgggagg gggacttctg cagaactgca aaatgtgagc cagcatgtcg tcatggaggt
                                                                     1860
gtctgtgtta gaccgaacaa gtgcctctgt aaaaaaggat atcttggtcc tcaatgtgaa
                                                                     1920
caagtggaca gaaacateeg cagagtgace agggeaggta ttettgatea gateattgae
                                                                     1980
atgacatett aettgetgga tetaacaagt tacattgtat agtttetggg aetgtttgaa
                                                                     2040
tattctattc caatgggcat ttatttttta tcctgtcatt aaaaaaaaa gactgttatc
                                                                     2100
                                                                     2119
ctgctacaca aaaaaaaaa
```

```
<210> 5308
<211> 1550
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (17)...(1495)
<223> similar to gi3327146 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5308
gaatteegea egageteece eagggeetee teeettaggg geaateatge eaceteetgg
                                                                        60
 tgctccaatg ggcctagcac tgaagaagaa aagcattcct cagcccacaa atgccctgaa
                                                                       120
atcetteaae tggtetaaae tgeeegagaa caaaetggaa ggaacagtat ggaeegaaat
                                                                       180
 tgatgataca aaagtettea aaattetaga tettgaagae etggaaagaa eettetetge
                                                                       240
ctatcaaaga cagcagaaag aagcagatgc cattgatgac actctgagtt ccaaacttaa
                                                                       300
agttaaagag ettteggtga ttgatggteg gagageteag aattgeaaca teettetate
                                                                       360
gaggttgaaa ttatccaatg acgaaatcaa acgggcaatt ctaacaatgg acgaacagga
                                                                       420
agatetgeec aaggacatgt tggaacaget ettgaaattt gtteetgaaa aaagtgacat
                                                                       480
tgacctattg gaggaacata aacatgaact ggatcggatg gccaaggctg ataggttcct
                                                                       540
ttttgagatg agccgaatta atcactatca gcaaaggttg caatcgctgt acttcaaaaa
                                                                       600
. gaagtttgca gagcgtgtgg cagaagtgaa acctaaagtg gaagcaattc gttctggctc
                                                                       660
agaagaggtg tttaggagtg gtgccctcaa gcagttgctg gaggtggttt tggcatttgg
                                                                       720
aaattatatg aataaaggtc aaagagggaa tgcatatgga ttcaagatat ctagcctaaa
                                                                       780
caaaattgct gacacaaaat ccagcatcga caaaaacatt acccttttgc actatctcat
                                                                       840
cactattgtg gaaaataagt accccagtgt tctcaatcta aatgaagaat tgcgagatat
                                                                       900
tecteaaget gegaaagtaa acatgaetga getggacaaa gaaataagta cettgagaag
                                                                       960
tggcttgaaa gcagtagaga cagagctgga atatcagaag tctcagcccc cacagcccgg
                                                                      1020
```

```
agataagttt gtgtctgttg tcagccagtt catcacagta gccagcttca gcttctctga
tgttgaagac cttctaqcaq aagctaaaga cctgtttact aaagcagtga agcactttgg
                                                                    1140
ggaagaggct ggcaaaatac aaccagatga gttctttggc atttttgatc aatttcttca
                                                                    1200
agctgtgtca gaagccaaac aagaaaacga aaatatgaga aagaaaaagg aggaagaaga
                                                                    1260
acgtcgagct cgcatggaag ctcagctcaa agaacaacgt gaaagggaac gtaaaatgag
                                                                    1320
aaaagctaaa gagaatagtg aagaaagcgg agagtttgat gaccttgttt cagctttacg
                                                                    1380
ctcaggagaa gtgtttgaca aagacettte taaattgaaa eggaategea aacgtattae
                                                                    1440
caaccagatg actgacagca gcagagagag accaatcaca aaacttaatt tctaattttc
                                                                    1500
catgaatact tttttttaga aagctcatta gcagccctct aaagtgactg
                                                                    1550
```

```
<210> 5309
<211> 593
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(392)
<223> similar to gi4680392 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5309
gtectageca eeggtgtete ettetacate egeetetgeg eeggetgeea eeegegetee
                                                                       60
ctccgccgcc gccgccttgc tgctgctcaa agctgctgcc gccccttggg ctaaaaggtt
                                                                      120
ttcaaatgga acattttgat gcatcactta gtacctattt caaggcattg ctaggccctc
                                                                      180
gaggtatcag cagctctgtc ctcagaatgg gtcccccact tcacacagtt gtaggatggc
                                                                      240
tacagcaget ecaagcagea catteagagg aagaagaaaa aatgttteat ttqtqtqqtt
                                                                      300
ttaagcataa agaagttgtt teecagaget etttgeeage tgteateeet caaaaeteae
                                                                      360
tggccacaat tgcttcacat gcacctgcct gaaccagcca ccagaggggg ttaggaccac
                                                                      420
cacagattga ctagatccta aggattctct acctggggct ggagttcggg tcaggtgccc
                                                                      480
gggaagcact gtgcggtgtg ggaggatgaa tatgtgccaa tttggaaaga tgagtatttg
                                                                      540
tgggaaaatg aataaagcaa agtgtaaatc agaggtttaa gttaaaaaaa aaa
                                                                      593
```

```
<210> 5310
<211> 940
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (4) ... (137)
<223> similar to gi3242244 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5310
gggcgtaagg gatcaggaag tgagcggctg cctccctcag ggctcctggc caaacctcca
                                                                       60
aggacagece ageceecag gecaceagtg cetgagecag ecacaceceg gggtetecag
                                                                      120
                                                                      180
ctttctgcca acatgtaaaa cctttgagta catccagcct tagttcttgg ggtgcagtag
tatgtaccca agggcagatg cctcttgggg aaggccatgg ggacctgaaa cattgccca
                                                                      240
tggaaatgtc gaccctgtgc ggacattccg catactgcca tgaagacggt ctctgtgtcc
                                                                      300
tcagctcaag aatcctgtag cttgtcccat cataatccat tcacccgttc atcatgtgta
                                                                      360
ctgagcagct accatgttca aggtaatatg ccaggcgctg tatgtctcca ctgccaagta
                                                                      420
gaagtgactc aaaaccctct gacaaggata ttcccttggc tatggtcctg ccaggtgcag
                                                                      480
gcccaggccc atgaccccac ctttactaag cacaagtact tgccactgcc atcactgcca
                                                                      540
agtaactaga tgtctctgtt tccctgccaa tgatcctgca ggttctgccc ggtctggtta
                                                                      600
tetteetgtt cetgtageat agecaggeae tgecaateae etgtgeeece attgetgtea
                                                                      660
geagatgtet tgggteetga gtgtgggtat ceaettttae eegeteaetg eeaectgtgg
                                                                      720
acactetgtg tetaccetet gagtgggaac atacttetaa gatecetgea gtetetgtee
                                                                      780
tgtggtagac catctttttg taaactggga gcttcctctt ccctgtaccc tctgccccag
                                                                      840
tegtgacece ctaaaagtta aggggtagtt ggcaceteet tattaatatg ccageetaga
                                                                      900
teceecegg tggagggea aatggetgaa teettgtgtg
                                                                      940
```

```
<210> 5311
<211> 902
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(903)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2)...(595)
<223> similar to gi5031291 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5311
ggagccctca ccacccccac cgcctggctg ctggggctgc tggcataagg ggcacgggga
                                                                       60
ggccatgccg ctgcacaggt atggggtggg tgaggcggcc gtaggcgctg aggccgggga
                                                                      120
ggcgaccete gggggtggcg gtgggggcgg etcegtgget teacceacet ceagetecgg
                                                                      180
cageteeteg aggggeactg agaggeegeg etcaeteaag aggggeteea ageegtegge
                                                                      240
gtoctoggco togotggaga agogcatgaa gatggtgtoo cagagettoa cocagegett
                                                                      300
teggetgtet egggacagga aagtggecaa gtegetggee gteategtga geatetttgg
                                                                      360
getetgetgg geeceataca egetgetgat gateateegg geegeetgee atggeeaetg
                                                                      420
egtecetgae tactggtaeg aaaceteett etggeteetg tgggeeaaet eggetgteaa
                                                                      480
ccctgtcctc taccctctgt gccaccacag cttccgccgg gccttcacca agctgctctg
                                                                      540
cccccagaag ctcaaaatcc agccccacag ctccctggag cactgctgga agtgagtggc
                                                                      600
ccaccagage eteceteage caegeetete teageecagg teteetggaa ttetggeeet
                                                                      660
getgeecect acceggeteg theececagg ggtgageece geegtgtetg tggeectete
                                                                      720
ttaatgccac ggcagccacc ctgccatgga ggcgccttcc tggggttggc cagagggccc
                                                                      780
ttcactggct ggactggagg ctgggtggcc ggccctgccc cccacattct ggctccaacg
                                                                      840
```

```
<210> 5312
<211> 2604
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2607)...(909)
<223> similar to gi805095 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5312 tttttttttt ttactccaaa gggtttattg agacaagttt tcacatacaa gatggggaca 60 120 gaggggttgg ggettataaa caggaacetg gaaggggaee gagggtgeag ggtagaacea 180 aacaagagag tgaaataaat agagggaaag agtggagaca gggaggagac tgactgagac catcacacag tgataatgcg ggtggggcgg cgccatgaaa atcccgttat ttatacagat 240 atacagggag ttcaggggga cccgaggccc actccaccct ccatgcccca gggaggggca 300 caagaaagcc gtctctaccc atgggcgacc ccatggggcg ctgggagggc tgccctagga 360 gtgttgggca atccctggcc tggaagcctt ggttagtgtc tggaaagcag tggagagggc 420 480 eggaggggag gggcagccag geeggggete agetetgagg eteceggetg ecaccettte 540 teccageaca geteetgeee aggtetggga ggatggggga tgggggagea ggageteaag 600 gggagaacct ggcaccttct ggagtcttgg aaaaactgat ccctaaagac acccggccct ggctgtgctg ccctctggaa agcagctctg ataccaggag cggctgtcag ggcacagggg 660 gaaaccccga ggccatcctc gggggtgatt cctgaaaggg gcccatcccc aggctggatg 720 cttggggaag gcagccgttg gggagggatt cctggggaaa gggccgttag caccaccagg 780 840 ctccatggca aacagacaga ggccaggcct ctgcacctcc agcgaggctg ggagtcccct cagececace tgeceggeec tacaceceag ceagegtgge ggecagggea gggceaggtg 900 ggcatcatac gaagacettg gccagggcat cagcgccage actggcaatg agggcettge 960 tggggtggca ggcaacagcg tggatggcct cctcgtgctt cttgcggtgg gccgtgatct 1020 cctgcacgca cgttttgttg tccaggctcc agagacgcag ggagcagtca tggcttcctg 1080 acatcaggaa tgcgccgttg gggtccacgg ctaggcaggt gactgcgtcc aggtgtgcaa 1140 ccatggagtg caccggctta cctgtccgat tgtccaggaa gcggatgccc ctgtcgtcgt 1200 . gggcggtgat ggtgagaggc tggtttggat gactcaccac ttggttgatc tgggttggac 1260 egetgetgee eegggaetee agegtgagga gggeaetgee aaceteeatg teatacaaga 1320 cggtgtcgcc agagcggaag gaggccacga tgtgggcagg ctcggtgctg gtgaaggcca 1380 ctgaggtggg gaccccgtgc tcgctggctg tggggaaggt gcagaggcag gccgggctgc 1440 tgctgctggg gtcccagatg cggacggtgc catcagcaga acaggaggcc aggcgctggg 1500 1560 aggtgggaet gaaggccagg ceceacaegg egteceegtg geeeteeagg aegtggetea gcacgettgg gtegtageea teatagggat ecatgetgag gtetggaate ttecaactat 1620 ggatgcaggc atctgccccg ccactgtagc agtattcact gttgctgccc atagccacag 1680 ccaacactgg gcccctgtga gcccggaaag catgtatagg ttccacatct agcgccgcat 1740 tettettgge egtgacegee ttetgeaggt tecagagett gagegtgeeg teeteggagg 1800 eggtgageag ageegaetgg etgtggtgga aggeeaggga aegaatgeeg tegtagtgeg 1860 agegeagggt gaacttgggg ttecaegtet tettaaaage atetttgetg teagaeagat 1920 egeagetgag gtegttgteg ttggtgaegg tgagatetge caagteeece aggeteaect 1980 eccegecee gatagtgtee atgatgaaga egtetteatg tggeegggge tggggtgtge 2040 caggaggcgg gccagtcact tttgggggca gcccatccac atcccgcagg tcagccagaa 2100

```
tgccttggag tttgacccga cggctttcca gctcatgggg gctcccatcc acagtgcacc
                                                                     2160
geogagggte tggagecect tecceatect etectgagee caggaaatea aacteattga
                                                                     2220
tagcatecte agagtegtet tecteateat egtetteeat ttegggeace agageettgg
                                                                     2280
atgggagett cacacgetge ttettgtget geacgetgte cageteateg teetegtege
                                                                     2340
tgtcttcgtc ctcgcagttc tgcaggaagg ggatctgccc cagcactgag ccgcccaagc
                                                                     2400
getetttgee atetttgeet geegegttee tetttatetg etectegate tgttteacea
                                                                     2460
gcagcgactc cccaccactg agccctgcag ggcctggtgg agccctgggg gccccttcac
                                                                     2520
teggetecae tgeceegttg agetecageg ageggeecag cagggaacgg acgegettgg
                                                                     2580
accgcatgtc gaggatggtg tctg
                                                                     2604
```

```
<210> 5313
<211> 2806
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2792)...(439)
<223> similar to gill50625 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5313
ttttttcagg tgctcaaact tttattttct tacaaaatgt tatagaaatg aacccaaact
                                                                       60
aaacagatat gtacatgtat atatgtacaa aattttactt ctgaaaaaga acctataaaa
                                                                      120
atagatogta ttaaaaaaac ttaaaaagat ttaaaaccaa tactatgaaa ttgattttot
                                                                      180
taaagtaata gtaatottaa attgoaggtt gtagttggtt ttooaggott atttatatgt
                                                                      240
ttgättgtgg ttggatätat aaaggagttt ettteattte agaatgeete caqteteatt
                                                                      300
ttattatate aaagagteea gaattttttt teeetteaea aateetteaa eateaggaea
                                                                      360
aggcatgtta agttacaaat cacctttggt catcatcttc ttcttgagtc acaggtctga
                                                                      420
aaggcaatgt agtttgtcct ctttcaggat cagacattcg gagaattctt atcagtttac
                                                                      480
tggatggaag tgaactcatg ctttgaggtg tgagcaagat aaactgtcta aaacgctggg
                                                                      540
aatctgccat cttcagtatc aagtccatgg caattctcct attaaccata tccatgtaga
                                                                      600
catcaaattc atccaggcat ctgaaaggag attctgcgat ggaccacagg gaaagaataa
                                                                      660
aacacactgt ggagaaagaa cgttcacctc cagacaaggc tctcatgtca ttgaaagcag
                                                                      720
etttatttee tteteeagge tgaactgata tacttagagt tteattettg tggteaaaat
                                                                      780
teatttttee acaataggee egetgagata gtaagttgte aaagtataat ttgeategta
                                                                      840
aagtcaaaca cettetaaat tgttgatatg tettgaatet gtgeteeatg attteteeca
                                                                      900
gtaatttaat aaactttttt aaagtcctca ctttactatc cagatcaaga taggtctctc
                                                                      960
ttgcttcttg gtactgcctc attatttcct ctcgatctcc atgactagca tgttctgcct
                                                                     1020
gtatettetg cettaatega ttaatttett tgteeagaat tgatgeagat ttttetaett
                                                                     1080
ctatacgete tgggcagatt tgtettgett gtgacatttt etectetagt tetttetett
                                                                     1140
tcatatccag ttctcgtttc tttttattta aggtatccaa gtgttctttt tgttttctt
                                                                     1200
cataatgtcg tttccctcgt ttttggttat ccacttcaga atcagcaagg tttaattcat
                                                                     1260
ccttaagtgg gtctgctagc tccgatagtt gattaatttt gaatttaatt gcatcatact
                                                                     1320
tattttctgc ttctattttc agacttttaa gatgctccat attttctttt tgttgctcca
                                                                     1380
tatgtteete aaceatttte attttgettt tatttteetg agetteatet tecaaagttg
                                                                     1440
caatatctac agactggtgt tcttctatgt tctcaagttc ccgaatttca gaaatatttt
                                                                     1500
ttcttatttt catctttagt tctttataat gtagttggca ccttttaaga agttcctcat
                                                                     1560
tgtgtttaat atctttttca agggcagata aatgttgctg aagatttaat atctgggccg
                                                                     1620
tettatttte aaceteatte teeaagteae ttattteaga atecacatet etgettagga
                                                                     1680
```

```
acttaggtct tgtattttca gatgaataat aacgtcctgc aaaaacttga tcaccatcag
                                                                     1740
cagtaaaagc ttctctacaa tttttgggtg gcttttggga ctgcattact gcacgagcta
                                                                     1800
cagaattatt tttgattagt agcactgtct ctatgcctct catgtcaatt aggctatttg
                                                                     1860
ccgcaaccgc attatctatt tctaaagctg tcagaactgt tggaaagtct ggatgataag
                                                                     1920
cagctctgtg tcttacatca tatatctcat tccgacactc agaaactatt atcggtggcc
                                                                     1980
gtgaggtcca tggtaaataa aaccttttca tgagtgcctg aaggaccctt tcatcagcat
                                                                     2040
gattatggca acaataggcc tgcagaagcc cttttaagca agattcaata gccaaagcaa
                                                                     2100
                                                                     2160
qttctqqqtc ccqaaqatqa atgcaagctc ctaaagggcc tacaggttta taggtaaaat
gtccttgtct ataagcatca tctatggctt caagaagagc tggaacatta gggccaaatc
                                                                     2220 -
ttttgagtcg atcagtttta ctatctttca attctttcag ttgcccctga ttgtagctca
                                                                     2280
                                                                     2340
gtgcatgctt cacatctaat tottototot taattttgcc atgttottot ttgtcctttt
ctatggcttg ctgaaactgt tcgatctctt gattgactga attttcttga ttttgaaagg
                                                                     2400
cctttactct ctcttttaac caagatattt ttttttgtct ttccaaccgt tcaggttcca
                                                                     2460
                                                                     2520
aagattggte agtacttttt ticagetett caattegitt acaaagetge teateatett
tetttaatge tttatatteg tttaaggate ggttatataa aaceteaget teattatagg
cccttttctt agcaacaaca tctgctttca atgccataca ttctggtgct cgtgcatttg
                                                                     2640
totottoact aatottttot agtttgtott gaatatoott gtacttttgt totgootcat
                                                                     2700
taagtetgae etgetgttet teeattttee tgteaagtet ageageaega tetteteeaa
                                                                     2760
ttttgatatt atctctgatg gcattcaatt gtttttcaat ttcatt
                                                                     2806
```

```
<210> 5314
<211> 1725
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1726)
<223> n = a,t,c or g

<220>
<221> misc_feature
<223> similar to gi5107000 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

```
<400> 5314
gactteeegg ttegaggget geetggeetg egecaeggee taetteatet teetetgeat
                                                                       60
ggagacccac tatgagaagg ttctcaagaa gatttcccgc tacatccagg agcagaatga
                                                                      120
gaagatettt geacetegag geeteetaet tacagaceet gtggagegtg ggatgagggt
                                                                      180
tattgagate tecatetaeg aggaceggtg eageagtgge ageteeagea geggeageag
                                                                      240
cageggeagt ggeageagea geggtggggg tggtggggeg ggggeeeggt gaetggeega
                                                                      300
gagteeetgt agggaggtgt atggeeggag tgagggeett geagaeetge ggeggetgeg
                                                                      360
ctaccagage accepettet gagteattet ttgggeteac cetgetgeec ggggtgggag
                                                                      420
ggagggtgac gggcctcata tttcctgtgg gccatcaacc tatgccccct gtccctcacc
                                                                      480
ecegtetgga teagteeatt teetgaeetg ggggetttte etteeegatg gggetggtet
                                                                      540
gggccacaca gagacagatc ttcctaggaa ggctggggtg gggagaacac aacctaggcg
                                                                      600
geceetetet tecacagece eteteceaac eetgegaggg gggeegagge etaceacata
                                                                      660
gaggactece acactgeatg accepteate ceaaacecat atecaceagg actetttece
                                                                      720
ttgggccctg cgtcccgtgg ctgtctccca gtatctgttc cttctcatgc ccctgcaggg
                                                                      780
```

```
ccccggcctg tctatgatcc tgcctccacc aaattcaagg tgtggggaga cgggtgccgt
                                                                      840
ggttgggagc tgttcagcgc actcctgacc tcttctagac ctatggcttt cctgtcctgc
                                                                      900
attcagaget agaggecage teggeettge gagaageate caactttgag actttgeagg
                                                                      960
ctgccaggtg ctggttgggg ggcacagagc ctggggctct gggaggtaat atgggggtct
                                                                     1020
gggaaactcc gtgaagagac atagccatgc ggggcctgaa tctcctgaac tacagccagt
                                                                     1080
ttcctgagat tagaacctgt gtgtatgcac atgtgaatgt atgtgtgagt gcacatgtgt
                                                                     1140
gtaagtgcag tgtgcgtaaa tgtgtgagtc tgcgtgtgtt agcatgcctg tatgtgagcg
                                                                     1200
cgtgtgtgag cgcatgtgtg tgcaccagtg cacaagtgta tgaatgtgga cacatttata
                                                                     1260
agcacacctg tgtgtgtctg agtacatgtg cacacacgtg tgcacaaatg tgcatttata
                                                                     1320
tgagtgtgag tgcatgcatg tgcatgaaca tgtgtgcaca agcatgtgtg tatgagtgtt
                                                                     1380
catgtgtatg agtgtgtgtg tatgcaggtg agtgcatgtg tgtgtgagtg tgtttgtgtg
                                                                     1440
ttccccttgg ctgccaggcc aacgactgct tctctgcatc ctgctgtctt cgctacctga
                                                                     1500
gggtctgtga cttcttccct gtgtgggtcc agcctgaccc cctgtaagta aatgtccaaa
                                                                     1560
ageceettge cectececta ggggetacce agggaacata etettactgg cattatgttt
                                                                     1620
ttagttggga ggaggaaggc enggggtttt taggggaaag gaaggagnec aaacttttgg
                                                                     1680
ttgggccttt tggtggcccc ctnttcaggt tccccatgaa caagg
                                                                     1725
```

```
<210> 5315
<211> 2185
<212> DNA
<213> Homo sapiens
```

<220> <221> misc\_feature

<222> (1)...(2075)

<223> similar to gi2822143 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5315
atgtgtaget caattetgaa ggacattetg cacetggetg agcacgatgg aacacacet
                                                                       60
gagcaagggc tgtacacatg tgcagcagag catgacctgc accaaaagga gcagattaga
                                                                      120
gagaagetea eeagaagtga tgagtggagg cetteatttg tgaaceacag tgeteacgtg
                                                                       180
ggagagaga acttcacatg cacgcagggt ggcaaggatt ttactgccag ctcagacctt
                                                                      240
etccagcaac aggtettaaa cagtgggtgg aagetgtaca gggataceca ggatggggaa
                                                                      300
gcctttcaag gtgaacagaa tgatttcaac tccagccaag gtgggaaaga cttttgccac
                                                                      360
caacatgggc tgtttgagca ccaaaaaacc cataatgggg agaggcctta tgagttcagt
                                                                      420
gaatgtgggg aattgtttag gtacaactcc aaccttatta aatatcagca aaatcatgct
                                                                      480
ggagaaaggc cttatgaggg cactgaatat ggaaagacct ttattagaaa gtccaaccta
                                                                      540
gttcagcacc agaaaattca cagtgaaggc tttctttcaa aaaggtctga ccccattgaa
                                                                      600
catcaggaga ttctcagtag accaacacct tatgaatgca cccagtgtgg gaaggccttt
                                                                      660
cttacacagg ctcatctggt tggtcaccag aaaacccata ctggagaaca gccctatgaa
                                                                      720
tgcaacaagt gtgggaagtt ttttatgtat aactccaaac tcatcagaca tcagaaagtt
                                                                      780
cacactgggg agaggcgtta cgagtgcagt gaatgtggga aattgtttat ggacagcttc
                                                                      840
acacteggta gacateagag agtteataet ggagaaagge ettttgaatg cageatatgt
                                                                      900
ggaaaattet ttagteaceg etecacaete aatatgeace agagagttea tgetggeaaa
                                                                      960
aggetttata agtgtagega atgtgggaaa geetttagee teaaacataa tgttgtteag
                                                                     1020
catctgaaaa ttcatactgg agaacggcct tatgagtgca ctgaatgtga gaaggccttt
                                                                     1080
gttagaaagt cccacctagt tcagcaccag aaaatccaca ctgatgcatt ttcaaaaagg
                                                                     1140
totgaccica ticaacacaa gaggattgac attaggocaa ggoottatac atgoagtgaa
                                                                     1200
tgtgggaagg ccttccttac acaggctcat ctggttggtc accagaaaat ccatactgga
                                                                     1260
```

```
gaacggcctt atgaatgcac tcaatgtgcg aaggcctttg ttagaaagtc ccacctagtt
                                                                     1320
cagcatgaga aaatccacac tgatgcattt tcaaaaaaggt ctgacctcat tcaacacaag
                                                                     1380
aggattgacc tcaggccaag gccttatgtg tgtagtgaat gtgggaaggc cttccttaca
                                                                     1440
caggeteate tagatggtea ecagaaaate cagaetggag aacggegtta tgaatgeaat
                                                                     1500
gaatgtggga aattetttt ggacagetae aaacttgtta tteateagag aatteacaet
                                                                     1560
ggagaaaagc cttataaatg cagcaaatgt gggaaattct ttagatatcg ctgtacactg
                                                                     1620
agtagacatc agaaagttca cactggagaa agaccttatg agtgtagtga atgtgggaaa
                                                                     1680
ttttttagag atagctacaa actcattatt catcagagag ttcatactgg agaaaagcct
                                                                     1740
tatgaatgca gcaactgtgg gaagtttctt agataccgct ctacattcat taaacatcat
                                                                     1800
aaagtttgca ctggggagaa gcctcatgag tgcagtaaat gtagggaatt gtttaggact
                                                                     1860
aaatcgagcc ttattataca tcagcagtct cacactggag aaagtccttt taagttaagg
                                                                     1920
gaatgtggga aagacttcaa caaatgtaat actggtcagc gccaaaaaac tcacactgga
                                                                     1980
gaaaggtett atgagtgtgg tgaatecage aaagtgttta aatacaacte cageeteatt
                                                                     2040
aaacatcaga taattcatac tggaaaaaagg ccttagtgga gtgaatgcag gaaagtcacc
                                                                     2100
aaaactgtca cctcattcag caccaaaagg ttcacatcgg accaagaacc tattaatata
                                                                     2160
tgtaaatcta atgttgaaag agttc
                                                                     2185
```

```
<210> 5316
<211> 1446
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1222)...(265)
<223> similar to gi709961 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5316
ttttttttt ttcgtacaaa cataaatata tttaaatttt ttaactgtaa gtaaattcaa
                                                                       60
acaaactgtt ataaaacaga atacacagtt gtctgcatag atcataaaaa acataaaaac
                                                                      120
cagaatgetg ggtaggtget ggtggtgaaa actgcaggge taaaacttge tcaacaatga
                                                                      180
actagggacc actatggett aatgaacatg geceaeceet eetaetaatg gttttgteaa
                                                                      240
ettttggace ctagaaatte agaattttet eettetteet etgeeagett tggteegtgt
                                                                      300
ccgactacct ggctggacag taacttgctt tttaaagtcc actaagcaat ctgtggcttc
                                                                      360
tgaaatggaa acaaaagact tgacgggaga ttcatttaag tcacgacgtg tgaaagaact
                                                                      420
etgeatetet etgetgeage etgeetette catecetggt gaaggeacee tgaaggetee
                                                                      480
tgtttctgaa gacttgatgt ctgcatctga agtcttgtgc tcagactgtt ccaagaaact
                                                                      540
aaggagtegg eetteactgt ggeettttte etttgggtte tteageetet getgeeactt
                                                                      600
cccctccaca gttgaacatg ctcttccact cccttcaggt ccatctcctt ggtcagcctt
                                                                      660
tgcaagctgg agacaggagt ccacatgaca ctgatactct ctaaatggga ccagggattt
                                                                      720
acagaggtaa cactteteat tettgteaat gtetagagaa gtetgggeag etgteecaet
                                                                      780
gtcactcttg gtcttggcct ctttttgtct ccgagtcaat actgtatctt cctccatcag
                                                                      840
accattgcag tacatggcat gtcgttcaat ctttgtgggt ggaaagcatt ggtcacatag
                                                                      900
cgggcaggat acctggttac tggatgagaa ggtagaaata gctacttcct tctcagcatc
                                                                      960
ttccttgtta ccaacctcct tatctgccat tattattctg actccatcca agatatctct
                                                                     1020
gctacctgga gagacttete tttcaaggte aaaagtttea gaggaactta getgtgtete
                                                                     1080
aggacaaaca gtgatttett etgeagaact etetggeata aggactaage ttetettaet
                                                                     1140
ggtcaaagca gcaacacttt gtgaagcagg tacagagttt ccctcttcag aagtttcttc
                                                                     1200
aacaatccct tgggaagact gcaaagaaat acgtagtatc ttaaatatac aggcacaggt
                                                                     1260
```

```
gaactggctt ctcttccttt tttaaaaaaa tttaattgtt caatgttctc cctcaacaat 1320 taacaataag aagaaaatat tttccataag ccagtaagtg tcaataaaac aagcacatcc 1380 tgtaaagtca gaagactggt atttaaatca gaactaaatc ctcgtgccaa gcttggcgtg 1440 atcagt
```

```
<210> 5317
<211> 2681
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (475)...(1170)
<223> similar to gi1769491 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

#### <400> 5317 60 ctctgtggaa tccggcgtaa tgtttctgca cgcctacccg ctcattcagg aagccagcct egecattagg gagtetttte teaccetgae caagttttee caetggette tteattgtat 120 ggcattcaga ttgcagatca tcagttgaga caagccacca agattgcttc agcacctgaa 180 aaacteggge gagateeaeg geeacagaee teeaggataa geeaggagea ggteeetgag 240 gcctcacagc tctcccagct gacttcaaat ctggcccagg tgaatcggac aaatatgact 300 coctcagace coctgeagae etegetgtet ceagaacttg tttccactee tgttectece 360 cetecteceg gggaggagac caatetggaa geatetteet eegatgagea geetgegtee 420 ctcacaatag cccacgtcaa gccaagcatc atgaagagga atgggagctt tccaaagtac 480 tatgcctgcc acctgtgtgg acggcgcttc,actctccgga gcagcttacg tgaacacctc 540 cagatecaea caggagtace ttteacatet agecaacagg gagaaagteg egteeceetg 600 actetetgta geaatgeage tgaceteggg aaagatgeea tggaagtgee tgaageeggg 660 atgataagtg acagtgagct gcagcacatc tctgattctc ccatcatcga tgggcagcag 720 cagteggaaa ecceaecece etcagacatt getgacattg acaacetgga geaggeegae 780 caggagaggg aggtgaagag gcggaagtac gagtgcacaa tatgtggacg caaatttatc 840 cagaaaagcc actggaggga acacatgtac atacacaccg ggaagccttt caagtgcagc 900 acttgtgaca aaagettttg cagggccaac caggetgece gecaegtgtg ceteaaceag 960 agcatcgaca cttacaccat ggtggacaaa cagactctgg aactctgcac atttgaagaa 1020 gggagtcaga tggacaacat gctggtgcaa acaaacaaac cctacaaatg caacttgtgt 1080 gacaaaacat tetecaetee caatgaggtt gttaaacatt catgecaaaa ccagaacteg 1140 gatgtttttg ccctagacga agggcgatcc attctcctgg gcagtgggga ctcggaagta 1200 acggageetg accacccagt gttagettee atcaaaaagg aacaagaaac egtettaeta 1260 gactgaatgt cacttatett tttaaaaaae teteattttt acaaagaeta tetteeetee 1320 ettecetgaa tteagaactg tagtteteea tggeatgata caaacaggte ettgttetet 1380 tetectette ceettiteea cateceagee ceacetetgt aaaggetttg tgeattataa 1440 acctggaatg tatcgacttt ctttcagggg atattggaaa gataatggtc attatactta 1500 taaactcaaa ttttgagagg ttttagatta ttcagaagca tacttggaac taatgaaggg 1560 tatataataa aacaactgga atccaatttg gtaagctaaa attatgactt tccctgggta 1620 aaaagtette teagaaaaac aatgteagaa aataacageg tgetgettag aaataegget 1680 gggctctgta ctatgcaaaa tctagaaagt gtggggaaac tttaaaccca agaaaacgtt 1740 cttagtatte atectecagg tgtettaett cagaatgeat cetttgagat tatgtecaet 1800 taagagaaat catcagttaa gaaatctact ttaacaaaac aaaaaggaga aaaagtaata 1860 atgtgatggc aatcttaatt tttgggtaca acatgacaag ctgtgagttt gtgtgtttgt 1920 aagagaaaaa tgtgtgggta cttgctaata aacaggtgaa ttaatgcaca tccttatctc 1980

```
attgctggct tctttccaag ttgagcaaca acaaaatgct gtatttgagt ttctgacaaa
                                                                     2040
tttgttttaa aaatcaaatt tgaatgtact attctataaa ttgcctttct gaatagaaca
                                                                     2100
tgacatgeca ttttctagca getgecagtg ataatttgtt ttacactaac ttttaaatca
                                                                     2160
gtgtgtgtac tgcagggaaa aggatatagg aatactcatc ttacagggga atttgtgacc
                                                                     2220
agaagatgta gtaacttcaa tgactgaaag tcaatgctga tagtttactg gcaacattaa
                                                                     2280
ttgaagcatc aaaaataaat ggcaaagaga aatcaggaca aaaaatctaa ttgctgtttg
                                                                     2340
ggaaaaaact tgattttgat gtttattctc caggtttttg gttgtttttt tttctttctt
                                                                     2400
ctitcttaat gcctgaaatt ttctccattg gcccgaaagc agtaaaaatt gttcattaat
                                                                     2460
cttccgttag gccaataaaa gaagggcctc acaagacaaa acaggagcca gaagtaagga
                                                                     2520
ctgaaggaga aggggagaat agctaatagc tatagtatat gtatatgtta aaaactgaat
                                                                     2580
atcccatcat cctatttcat gtatagttga gttctcaaat ttgtaagttt ttatacatcc
                                                                     2640
tttcattgaa taaacgttta attaaatgac taaaaaaaaa a
                                                                     2681
```

```
<210> 5318
<211> 1044
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (973)...(379)
<223> similar to gi2760121 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5318
ttttttcaat attacaacaa tctttattgg aaaaccccaa gtattttgtc ttgaaaaatc
                                                                       60
agcaatccag gtattaaaaa tagcatggaa tgcccaattt tactttgata attacatggt
                                                                      120
agteagttte egeteetgge taaageettg gattttette tgggeagtte etaaaggeae
                                                                      180
aggtggcatg gaagaaatca ttocattttc gtctcctccc cttatttqat tqqqqtqtct
                                                                      240
ggttaccaaa aagagtcatc aggcccttgg attaccttct tgaactgatc ttctagatcg
                                                                      300
caagtcaaga ctgccatcat gttcccccaa atgcaaaaag ccttgttgct ccacctctct
                                                                      360
cetttecaga acaagtgage tggggtttge tttettetee atateetgea gettgateaa
                                                                      420
tttttctatc aggaacattt tatctttgcc ctcattaatg atctgctcat ggagcagcct
                                                                      480
tatcataatc ttccttccct ctgtgatctg ccagtaaaga taggtgatga ttagcacaat
                                                                      540
gagggtgagg atgaaaaaga agtgcacact tccaatgagg ttccgataga tccaaacaac
                                                                      600
ccacaggtag ccaggccgtg tacttagggt gtcgatccag ctgtagatgg agtgaatgaa
                                                                      660
gagaggcaga cetegaaaag ggecacagte agetgaagge tteaatetee agatggtgat
                                                                      720
ggccagggtg cacaagaccc cggtgaagga tgggaaaaag agcaagaaga tgaagaagt
                                                                      780
catcatctgt gaggecegec aggetttget eggaggetgg aaatteatea teaggetgat
                                                                      840
atttttggag tagaccatga tgaaaagcat aatcatttgg ataaagggca gcagggggca
                                                                      900
aaagaatatg ccaatccacc ccagagtttg tgcatagatc agttgtagaa cgttcctggc
                                                                      960
aatgtcaaac teetgaagge caagaettgt gateagttge ateecaatga ttataateag
                                                                     1020
caaaagcgtc gggccacgcg tccg
                                                                     1044
```

<210> 5319 <211> 1480

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(542)
<223> similar to gi303694 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5319
cagagaagca agttcgagaa cgaggagttt tttaggaagc tgagccgcga gtgtgagatt
                                                                      60
aagtacacgg getteaggga eeggeeecac gaggaaegee aggeaegett eeagaaegee
                                                                      120
tgccgcgacg gccgctcgga aatcgctttt gtggccacag gaaccaatct gtctctccag
                                                                      180
ttttttccgg ccagctggca gggagaacag cgacaaacac ctagccgaga gtatgtcgac
                                                                      240
ttagaaagag aagcaggcaa ggtatatttg aaggctccca tgattctgaa tggagtctgt
                                                                      300
gttatetgga aaggetggat tgateteeaa agaetggatg gtatgggetg tetggagttt
                                                                      360
gatgaggage gageecagea ggaggatgea ttageacaac aggeetttga agageetegg
                                                                      420
agaaggacac gcgaatttga agatagagac aggtctcatc gggaggaaat ggaggcaaga
                                                                      480
agacaacaag accetagtee tggttecaat ttaggtggtg gtgatgacet caaacttegt
                                                                      540
taattaataq cacaqcaqat qtqtqctqcc catctttaca tacacattqc ttctaqttqq
                                                                      600
cagaaataat tgattaaaag accagaaact gtgataactg gaggtactac ggtctatttc
                                                                      660
tcaaccttag gcagtaatag acatcacaaa ctgccatggt tttgcactat gattataata
                                                                      720
cotgoattte taatttttta ageatgtage cagtaataat ttgaagtttt ttttetatge
                                                                      780
aagettaeet tgttggeatt attttaggga gttgaaacta teaactgtaa ageteetttt
                                                                      840
cttccacttt aatttaaaag ttcatgtcat ttaaaaacaa gtcaagaaat taaaattgta
                                                                      900
tcagagggtt ttctctaatc attttttcta ttttttttt tgtacttcta aatgtttggg
                                                                     960
ttatacaget teattttaga tgaccattet tattttttgg tttgtttgcc ccattteett
                                                                     1020
ttgtgttttt atagtctata gcattttaaa actgctgatg ttgtttgcat tatttacagg
                                                                    1080
ctaaaaactt agtagcatag agctgtctgc cacagccttc tgacaaagtt tacagttatt
                                                                     1140
aaagttgcag tatcctttta aatgctagta atcagcactc tttctttttt ttttttaaa
                                                                     1200
aaaaaacggg gcctccaagg gtgccccggg ggggcccaaa ccccggggaa aaaaggaacc
                                                                     1260
ccccgcctta acccccaaa ggaccgggaa taacggcctt ttttttttaa aaaaaaaagg
                                                                     1320
ttaaaagggg gataaacccc ggcccccgcc ccaaaagggt taaacctcqq qtccqqaaac
                                                                     1380
aaggagtggg gggggaaaaa tcccccaaaa agaacctcta ccggaaggcc caaaaaaagc
                                                                    1440
cccgggcggc ttttggttta atccggggtt tttttaaaaa
                                                                     1480
```

```
<210> 5320
<211> 956
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (937)...(614)
<223> similar to gil710282 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5320
                                                                       60
ttttttttt ttgagaaaca agcatttgtg tttattaacc aaggagaggg aagtcaaagc
aatgcagact cctaaccagt ccctcctata gtctgcccac ctaggccagc tgccaaggac
                                                                      120
taggaagagc agtggatagg cccctcccca ctgccccgac cccagggtga gttctgctgg
                                                                      180
                                                                      240
gtaaggaaga ggaagtcagc aaaggacaga ggccaaggaa agaaggagga aacagagccg
                                                                      300
ctggggagac aggattgagg agatcccttg gcccctcact cacagtgggg agggcaaagc
                                                                      360
accgcaaatg cagccccaca agaggaacta agcaggagta cactcatgtc adaaaccttg
                                                                      420
tattggggga ggggaggagg gggttctcag gtgtccaaag ccaagaacaa aacccttgga
                                                                      480
gagtcagtcc ttgcccaaga atgctggtcc agcctctaag cctttgcctc cataccaagt
tcacaacagg gtggagcctc tgacacggcc gtctagagaa tggatgcaag agaggtccag
                                                                      540
ggaccacttg cetetgtaag atcegteetg tggegaatte caggeecagt ggegeetage
                                                                      600
etteagetge tgggetetee egageetgee ttageecata caaccaettg ateaegeggg
                                                                      660
cattgegete caccacegae aegecatagg gaacgegete cegggeeege teetcaacag
                                                                      720
teacegaget geggegggag cageeeeett cagagetgee eggeeeagea etgggeeetg
                                                                      780
                                                                      840
ccagggacac gatatecgag etggeeegtg ecaggtggge cacacecaac cetetegeet
cctccgggtc caggccgcag aagttaaaaa agcgctcgag atcagcggct gccctagaaa
                                                                      900
                                                                      956
agegeteget caagteegae ttggagegtt ggaatteeae cacaetggaa tggtga
```

```
<210> 5321
<211> 777
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (778)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (92) ... (557)
<223> similar to gi1799568 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5321
gtgtggtgca attccctata gtgagcggga tgagctgacc gaggatgggg aaggcagcat
                                                                       60
ccgcagctct gaggagggc ctggtgacag tgcatctcca gtattcacag ccccagcaga
                                                                      120
gagtgaaggg ccaggaccag aggagaagag tcctggacag cagetcccca aagccaccet
                                                                      180
geggaaggat gtggggeeea tgtaeteeta egttgeacte tacaagttte tgeeceagga
                                                                      240
gaacaatgat ctggctctgc agcctggaga tcggatcatg ctggtggatg actctaacga
                                                                      300
ggactggtgg aagggcaaga tcggcgaccg ggttggcttc ttcccagcta attttgtgca
                                                                     360
acgggtgagg ccaggcgaga atgtttggcg ctgctgccaa cccttctccg ggaacaagga
                                                                      420
                                                                      480
acagggttac atgagectea aggagaacea gatetgegtg ggegtgggea gaageaagga
tgctgacggc ttcatccgcg tcagcagtgg caagaagcgg ggcctggtgc cagtcgacgc
                                                                      540
cctgactgag atctgagagg agccaaggga acccagatga cacccttgcc catgcctgga
                                                                      600
cettgettet ggecagggag gggateagge cecettgtee actecatace ettecteet
                                                                      660
etgteeetet eetaggtgee aettaeegtg gettaggage ettttgtaet ggggaagatt
                                                                      720
ttatttettg ggtggggtge cetgagtggg ttgateetet gggaettgge ggngatg
                                                                      777
```

```
<210> 5322
<211> 1980
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1778)...(935)
<223> similar to gi3043548 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5322
tttttttttt tgagacagag ttttgctctt gttgcccagg ctggagtgca atggcgctat
                                                                       60
ctcacctcac tgcaacctct gcctcccggg ttcaagcaat tctcctgcct cggcctccca
                                                                      120
agtagctggg attacaggca tgcaccacca tgcccagcta attttgtatt cttagtagag
                                                                      180
acagggtttc tccatattgg tcaggcttgg tctcaaactc ccgatctcag gtgatctgcc
                                                                      240
egecteagee teccaaagtg etgggattac aggcaagage cacegegeee ageaeggtet
                                                                      300
tttcaaagac cagataattt atttaaccaa ctgtctaaag atggacattg tgattgatca
                                                                      360
cactatttta tatgtaacat tgaatggagt gggtgagtcc taggaaacat tctctcctaa
                                                                      420
aagtttacat ttttcattga ctagaagtga ccaaaataga ttctactgat gagaaaagac
                                                                      480
ttttgaaagc agtatggtca ggttggcagg tgaatggcct caagagctta ggatttcatt
                                                                      540
gctactaaaa gaacaagact attcagttgt gaaacaatga tttagtcaaa tactgatgct
                                                                      600
gtctcagatg agtaactgca aatcacttca aaaggtagaa gggtagctta aatgtgaaaa
                                                                      660
aggttactgc cacttcatgt agggaagata acaagcattt gcaaatagca aaatagaaag
                                                                      720
aaataaatgg tttcagtaca agctcttata ttcacttggc atcaaaatag tccaaaataa
                                                                      780
atctgagaac cacggcaagt tatagctgtg ttaatgacaa aatgtgatat ttactgttta
                                                                      840
aatttagcag ctgggagaat ccccttataa ggaagacaga aaatacattt atatccagac
                                                                      900
tgcattactc tttggaaaaa'tatgaccaat cagattttgg gtattattgt tacaaccttt
                                                                      960
tectteacet etgeateatg gtgateaact aaagetetta tittetggge acattettet
                                                                     1020
ccatgtaaca ggaaaaacaa tgaaccttca gtgaaagtag gctgcacagc taaatggcct
                                                                     1080
tctattttga ggcagttctt tatattctga aatagcgtaa gtactcgaag aagaatctcc
                                                                     1140
tttgctacgt ggctgtcata aagggaaagg aatgatgaat ccacttgggc acggagaagt
                                                                     1200
cettetgtea tggetggatt tteagacaaa tteaaaagea gttteaaaac ttgeacette
                                                                     1260
gtgtttccat ttccagtaag taacacctgg aacaggtctg taatgtaact gtgaagcatg
                                                                     1320
tgctggtggt cattggtaac agtcatgttt gtcaacaatg tcagtccagc cagctgcaca
                                                                     1380
gcagagttca gaggaccaga gaagacatcc tcacatactt gactgatgta tatctttatc
                                                                     1440
ttgatttgat tttcaacatt cacactcagg ttatttagtg catttaaagc tttctcttta
                                                                     1500
atactctggt tggaatggtt gattttgttt gcaacaattg gaataccacc caattcacga
                                                                     1560
ataatagett ggttaactga aaaggetgea ttgttaceca aagtaateaa agetetttea
                                                                    1620
ataattacag gatcctccgt tgactccagc aggtaaagga gtttctgaag ttgttcagca
                                                                     1680
tttagaacat catcatatga accatcagtt aagtottotg oggacttoga agagogtato
                                                                     1740
ecgagetege ggtegeeeeg eegeegaeee egggteagee tgtaaatgea gtageaggeg
                                                                     1800
ecegegeega geageaggee egeegeeace cageeegege ecegggggee acceatgetg
                                                                     1860
ccgccgcggc agagccgcag cgccgggcca gggcaggagg ctcgcggggg ccagcgcgga
                                                                     1920
ggtctccagc gcacgcgggc ctagccgcca cagcaaacgc cacctgacct ggctcgtgcc
```

```
<211> 620
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (289)...(600)
<223> similar to gi2995577 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

### <400> 5323 tetegetgee teacttgage aageatgage eeggagetet eeatgaaegg eeaggetget 60 ggctatgagc tetgeggtgt getgageegg cettegtega ageagaacae geeceagtae 120 etggeeteae eeetggacea ggaggtggtg ceetgtacee etageeaegt eggeeggeeg 180 cgcctggaga agctgtctgg cctagccgca cccgactaca ctaggctgtc cccggccaag 240 attgtgctga ggcggcacct gagccaggac cacacggtgc ccggcaggcc ggctgccagt 300 gagetgeatt egagagetga geacaceaag gagaaeggee tteeetaeea gageeeeage 360 gtgcctggca gcatgaaget gageceteag gaeeegegge eeetgteeee tggggeettg 420 cagettgetg gagagaagag cagtgagaag ggeetgagag agegegeeta eggeageage 480 ggggagetea teaceageet geceateage atecegetea geacegtgea geceaacaag 540 ctcccggtca gcattcccct ggccagcgtg gtgcttgcca gccgcgccga gagggcgagg 600 agcacccca gtcccgtgct 620

```
<210> 5324
<211> 1000
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(677)
<223> similar to gi2662587 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5324
attgccaaca tgtttctagg aattatcatt ttgaagaaaa gatacagtat attcaaatat
                                                                       60
acctccattg ccctggtgtc tgtggggata tttatttgca cttttatgtc agcaaagcag
                                                                      120
gtgacttccc agtccagctt gagtgagaat gatggattcc aggcatttgt gtggtggtta
                                                                      180
ctaggtattg gggcattgac ttttgctctt ctgatgtcag caaggatggg gatattccaa
                                                                      240
gagactetet acaaacgatt tgggaaacae tecaaggagg etttgtttta taateacgee
                                                                      300
ettecaette egggtttegt ettettgget tetgatattt atgaceatge agttetatte
                                                                      360
aataagtetg agttatatga aatteeegte ateggagtga eeetgeeeat eatgtggtte
                                                                      420
tacctcctca tgaacatcat cactcagtac gtgtgcatcc ggggtgtgtt tatcctcacc
                                                                      480
acagaatgcg cotocotoac cgtcacgctc gtcgtgaccc tacgcaaatt tgtgagcctc
                                                                      540
atcttttcca tettgtaett ceagaaceee tteaceetgt ggeactgget gggeacettg
                                                                      600
tttgtcttca ttgggacctt aatgtacaca gaggtgtgga acaacctagg gaccacaaaa
                                                                      660
agtgagcctc agaaggacag caagaagaac tgaggcctgt ctggagtacg tagaccagtg
                                                                      720
```

```
tcgtcgtgag ggtgggaccc tgtgaaggtc tgaccaccgt ttcgcttttg ttaatgccga 780 gctacccgca gtgctgagcc agccgtgcaa aaggaaatct tcaggagggg acttctcacg 840 ttgctcagac tgacacatgt agactaaata gaaacccctc agccctaaaa tagaaaaaag 900 aacagttctg gactattgaa cagcccattc atttatttct gttttgttta ccgacatatt 960 cagtattatt cttgtttct gaattctgag tctcttgaac 1000
```

```
<210> 5325
<211> 1663
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1645)...(750)
<223> similar to gi484102 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

#### <400> 5325 tttäagaact aatcaaatct etttaatgtt taageetatt tgtatetgat ättttgttae 60 ttgcagecaa aagcagecta getgatacae aategteeee etgeeeeetg gteaceetta 120 cageteagag atgaacteta gagaaatgea aageeecagt tgggageeag eeggagaete 180 teettegtet ttagettegg aaaataggae ttegteggeget gegegeagea teagategat 240 cacagactcc aagcaaaggc atgataggag tttatttaca gacaagacac agcaaccagc 300 acceacteag getetgacea ggggaggtgg tagacaagae eecagatata tataaatata 360 catataggte ecageaceat cageaceaga aegtteecea gecaggteec tgecagaagg 420 accaagagtc aggcaggatt gaggacatag aaaggagagg gccccagtct ttgccaggta 480 tcagtgatca cctgttatgg tccccatgtc agaggaagaa actatccttg gccttgaagt 540 gtggacactg aggagcatga ggacggagag accetetgga ggegeeeca tteetgtgte 600 cagectgtge ceteaatgee aaggecacag aagegaagtg ecageaggag cagettgggg 660 aatggagaca ctgcaggccc ctccaggacc atccaggagc caggcatgga ggtggggtcc 720 taggccatgg ctgcccatca cacaggagcc tcccccagtt tgctggtggc acttgtgact 780 cgcttattct cccggaggtt tcggaggcgg gcgctgaggc tgctgatctc ttccacatag 840 gcctggggca cccaccctt ctcaccatct gccaggcgga ccccttccag ccagccgtca 900 ctggtccagg tcctcactga caggatgtca gtcttctcca aggtcagctc atctgggtgc 960 agtgccttgt atgtcctaac acactgaacc tgggggcaat cttccccctc actgatgacc 1020 teettgteet eetggggget ggaggggeae aaggetgaga teeategetg etteteaett 1080 teegteeggg eeegeageag gaactggtge tteatgtget geeegtggag gagetggagg 1140 aggaacacgt ggccggggat gccctgcagc ttcaggctca ggtcccgcac ctgcagctca 1200 gccatcttgg catggacgaa aacggcaaac ttccctagct ccttccgccg agagagcagc 1260 aagcagtcat tgaagaggtg gaggtagact geettgetgg acagetteag ettggeaggg 1320 ggtgctgcag gcagtggtgc cagctctacc aactctccat gccgaaccag ccagcgggcc 1380 tgagagatca gcgggaaaat cttgccctca aagtggatct tcttgctcag gtggatgagt 1440 tectetgtee tetteatgga etgtacacta geattgeact cetgeaceag etcettgage 1500 gcattgaagg cettggtggc catgtetteg tettcagage cetgtgetgt cegettcagg 1560 atgtteteca ecaacatett gaggegggtg atcetetgga agggeaggat aaggaaggag 1620 gtaaggggca gacgctggca cgaattccac cgcactgtgc taa 1663

```
<210> 5326
<211> 3455
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3456)...(1981)
<223> similar to gi436222 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5326
ttttttttt ttgaagcact gttttaaaac aacttctcaa atttatttaa ctcatgtggt
                                                                       60
taacatggta ttgtataaaa agaaaaaaaa aacaccactc aatacttact aagccttgca
                                                                      120
gacageteag agttgaggea geatattggg catagagate ataggatttg tattateeet
                                                                      180
tgcaagatgg aactccaacc aacaccagaa ttttccaatt caaattcagt tttagtcgag
                                                                      240
accccagcat aatttttaga aaaaagattg gattgttgct tttcttttaa ttttccattc
                                                                      300
ctatttagac aaatgaccag aggcaatgac aaaagtaact gtttaaaagg gatttctctc
                                                                      360
cagaagtttt ttctaaaggt ttaagtccag gctttccatc cttctctcca tcctttttca
                                                                      420
ttttaaaaag aagggttttg gaatatgtca acctttactc agcttgctat acaaagccac
                                                                      480
tgctttagtc ctagacataa tgccaggact catctcccaa acttctgqtc ttaatcaaqt
                                                                      540
teatgettgg ttgetaaaga ageteatgtt aateceaaag teageacaat eecaacetta
                                                                      600
aaaagcagac agctgattgc atcacttacg acatacacca tcttgaggca aaagaagcca
                                                                      660
gtcagacace cettgtttge tacgtgtgag acacateage agttgageet gacceettee
                                                                      720
gcagagetea etgtgcaaaa teaccageae accaetgcaa tecaetgage teaccgeetg
                                                                      780
tecagecata atggaagtea ettgaaggtt ateattgtaa tagatgattt tecataagta
                                                                      840
actaataaaa atgttttctt tgatgtttag acctactaac aattcagtct ctccctctcc
                                                                      900
atcototott agggagootg tacttttaag caaataggga agctaaaaat acaaaggago
                                                                      960
aacatccatt tataaataaa tgtgtgcctt atcttcctca ctaacttcct ggaaaagtgc
                                                                     1020
tgtttttgaa tattctgttt tcttaaggag aaattttttg taaatgtagc acactgtata
                                                                     1080
taggaaggga tttctctttt tagtctttat ctcattgtac gggtttcact ctctaggtat
                                                                     1140
tgagagtggg ggaggagggg atcaacaaac cgcaaagagc agcataaagc acacccgta
                                                                     1200
tcagcagcac ggcagctcct ccaatatcgt caatgctgac tcgaggtaat ttctggtgga
                                                                     1260
gttgaacaca tcattaaatt tctatttgtg ttctgcctga ggcttttccc taaccactaa
                                                                     1320
ttgcaagtga aggtcccaga gagcttttgt gaaaggaaca gaacacaagc cacgtcctgg
                                                                     1380
tetgtageea ggtgteegtg taetgeataa tggaggaaga ggattaeagg gagattttea
                                                                     1440
cttcagcctt tagtccaacc aaaacttaaa agacttacag agaacagcct caggaggtta
                                                                     1500
ggggacagaa gtgtggtact gcaggaagac aagaggggta aacgtatcca gcagaatgta
                                                                     1560
aggataagaa acacccacat gaattettag aatacagagg aacaagaagg aataatteet
                                                                     1620
gtgccatatg cggaccaggg catagggtga gtggagcaca gtgggttagc cactaaatgg
                                                                     1680
cttcagtgag aattctgaaa actgttccag tataattttg gagtaaatcc ttctcctgga
                                                                     1740
caggicaaag acigigetti tiaaatgica tiagaaggia acagettiti geeteetget
                                                                     1800
tecagatgat tteettttgg ttaaaaaeca gaaatagtat aaaceteaca ggatgaaaga
                                                                     1860
acagtetttt gatacaggtg aggtggagat etagatgaae ttacatagta agtgaggagt
                                                                     1920
acatttcttg gtcttctccc ttgaccactc caagtctctg atctaccaga gatggcagtt
                                                                     1980
tatttcctct ggaagaagcc agtaatggac acctgtctgt tggctttgcc cagagcagca
                                                                     2040
gtccctttct tggggccctt tcgttcctct ctgggttctt ttttcacagt catggcaggg
                                                                     2100
ggtctgtgta ctgaggatgt cttcatgtta agctcctctt cactatctgt gcaggattca
                                                                     2160
ctctcgtaga ctttttcagt cactatgcag ccttccccat ccaggtaagt tttagatttt
                                                                     2220
agtacgcgtt ttcgttttct tttgttttct ccacttgagc tcttgacaga aggaggttca
                                                                     2280
ggctcagtct ttggcactgg ttcaagaggt ggagacggag gaggaggtgg ggatggtgac
                                                                     2340
tragetteat aagecceagg agagtetgga aagaetteat etteactget ateagattea
                                                                     2400
ggaagtttga ttetteteet ettttteete atgtttteag ttteetttgt eteateatea
                                                                     2460
```

```
gataatgcta ctcgcttccc cctttttttt tccttctgca gcaccttaac aggctctgct
                                                                     2520
                                                                     2580
tttttgctgg attttttcag gcctgcagga gttgccagct ttggttccgt gacagacact
gtaggetget ccactatttt ttettettte aetgettgtt etgagteeaa attgaettta
                                                                     2640
aatttattca tagcagcttt tccaaaaaag ttgctcatca tattcccttt ccctggtgcc
                                                                     2700
ttgttgcctg ctgcagatgc atttgttact tctttagcct ctgttttcgt ttccttgttg
                                                                     2760
                                                                     2820
gtttcttggg ttttagcagc agctttggag gcaaacattc ccataattcc tttgggctgc
                                                                     2880
tgggaaacct gcttggatgc aggtgggcca tgaccattgg tggtcagctc attgttggct
                                                                     2940
tgtgtctcac ttgacatgtg aagatgtgac tgctcaaact ttttggaaga cgaagaggat
                                                                     3000
tcagcaggag ctctggggac ggcagctgca cattgtatag cactaaattt gctgcagttc
                                                                     3060
tgcaagttgc ttttaaggat gtcatagtca gtattgaaca gaggcccact gtcctttagc
                                                                     3120
atggetttet ggatgetgta cacatggatg etggeagtea cagetagett ggaetteact
                                                                     3180
gettecaatt tatettetet caetaetgea acettgtgge aggaatgtee attetgaatg
agactgccag acaccaagta ggtaacatgc agttgggctc ctgaattttc ttttcgtttc
                                                                     3240
                                                                     3300
ctttcaacat aatcatacag catctgtttg gcctggttaa catgaacccc tagtgtatag
ctcagccatt tgtatgtcac gatcttgttt tggtccgtga cgaactcgtc tatattttcc
                                                                     3360
agataaagct ggtccgccat ggtgcggcag cgctgggacc cgcctctaac ccctctctca
                                                                     3420
atcacageca cagetecege eggegggaaa egtet
                                                                     3455
```

```
<210> 5327
<211> 2102
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (26)...(1969)
<223> similar to gi4322263 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5327
accegggteg acgattegt etegececae eccaetggtg actgeeggge eccttgtgae
                                                                       60
ceccaeteca geagggacee tegaceeege tgagaaacaa gaaacagget gteeteettt
                                                                      120
gggtctggag tccctgcgag tttcagatag ccggcttgag gcatccagca gccagtcctt
                                                                      180
tggtcttgga ccacaccgag gacggctcaa cattcagtca ggcctggagg acggcgatct
                                                                      240
atatgatgga gcctggtgtg ctgaggagca ggacgccgat ccatggtttc aggtggacgc
                                                                      300
tgggcacccc accegettet egggtgttat cacacaggge aggaactetg tetggaggta
                                                                      360
tgactgggtc acatcataca aggtccagtt cagcaatgac agtcggacct ggtggggaag
                                                                      420
taggaaccac agcagtggga tggacgcagt atttcctgcc aattcagacc cagaaactcc
                                                                      480
agtgctgaac ctcctgccgg agccccaggt ggcccgcttc attcgcctgc tgccccagac
                                                                      540
ctggctccag ggaggcgcgc cttgcctccg ggcagagatc ctggcctgcc cagtctcaga
                                                                      600
ecceaatgac ctatteettg aggeceetge gtegggatee tetgaceete tagaetttea
                                                                      660
gcatcacaat tacaaggcca tgaggaagct gatgaagcag gtacaagagc aatgcccaa
                                                                      720
catcaccege atetacagea ttgggaagag ctaccaggge etgaagetgt atgtgatgga
                                                                      780
aatgteggae aageetgggg ageatgaget gggggageet gaggtgeget aegtggetgg
                                                                      840
catgcatggg aacgaggccc tggggcggga gttgcttctg ctcctgatgc agttcctgtg
                                                                      900
ccatgagttc ctgcgaggga acccacgggt gacccggctg ctctctgaga tgcgcattca
                                                                      960
cctgctgccc tccatgaacc ctgatggcta tgagatcgcc taccaccggg gttcagagct
                                                                     1020
ggtgggctgg gccgagggcc gctggaacaa ccagagcatc gatcttaacc ataattttgc
                                                                     1080
tgacctcaac acaccactgt gggaagcaca ggacgatggg aaggtgcccc acatcgtccc
                                                                     1140
caaccatcac etgecattge ceaettacta caecetgece aatgecaceg tggeteetga
                                                                     1200
```

```
aacgcgggca gtaatcaagt ggatgaagcg gatccccttt gtgctaagtg ccaacctcca
                                                                     1260
cgggggtgag ctcgtggtgt cctacccatt cgacatgact cgcaccccgt gggctgcccg
                                                                     1320
                                                                     1380
cgagctcacg cccacaccag atgatgctgt gtttcgctgg ctcagcactg tctatgctgg
cagtaatctg gccatgcagg acaccagccg ccgaccctgc cacagccagg acttctccgt
                                                                     1440
                                                                     1500
gcacggcaac atcatcaacg gggctgactg gcacacggtc cccgggagca tgaatgactt
                                                                     1560
cagetaceta caéaceaact getttgaggt caetgtggag etgteetgtg acaagtteee
                                                                     1620
tcacgagaat gaattgccc aggagtggga gaacaacaaa gacgccctcc tcacctacct
                                                                     1680
ggagcaggtg cgcatgggca ttgcaggagt ggtgagggac aaggacacgg agcttgggat
                                                                     1740
tgctgacgct gtcattgccg tggatgggat taaccatgac gtgaccacgg cgtggggcgg
                                                                     1800
ggattattgg cgtctgctga ccccagggga ctacatggtg actgccagtg ccgagggcta
                                                                     1860
ccattcagtg acacggaact gtcgggtcac ctttgaagag ggccccttcc cctgcaattt
                                                                     1920
cgtgctcacc aagactccca aacagaggct gcgcgagctg ctggcagctg gggccaaggt
                                                                     1980
gcccccggac cttcgcaggc gcctggagcg gctaagggga cagaaggatt gatacctgcg
gtttaagagc cctagggcag gctggacctg tcaagacggg aaggggaaga gtagagaggg
                                                                     2040
agggacaaag tgaggaaaag gtgctcatta aagctaccgg gcaccttagc ttaaaaaaaa
                                                                     2100
                                                                     2102
```

```
<210> 5328
<211> 2168
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1487)
<223> similar to gi3366802 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5328
gaatteteea eeacaacaaa cageeeacte eeatggeeta eetggacaag etggacetga
                                                                       60
cagacaacca tetgaccaca etgeceetgg etggaettgg gggettgatg catetgaage
                                                                      120
tcaaagggaa cettgetete teecaggeet tetecaagga cagttteeca aaactgagga
                                                                      180
teetggaggt geettatgee taccagtget gteeetatgg gatgtgtgee ägettettea
                                                                      240
aggeetetgg geagtgggag getgaagaee tteacettga tgatgaggag tetteaaaaa
                                                                      300
ggcccctggg cctccttgcc agacaagcag agaaccacta tgaccaggac ctggatgagc
                                                                      360
tecagetgga gatggaggae teaaageeae acceeagtgt ceagtgtage ectacteeag
                                                                      420
gccccttcaa gccctgtgag tacctctttg aaagctgggg catccgcctg gccgtgtggg
                                                                      480
ccatcgtgtt gctctccgtg ctctgcaatg gactggtgct gctgaccgtg ttcgctggcg
                                                                      540
ggcctgcccc cctgcccccg gtcaagtttg tggtaggtgc gattgcaggc gccaacacct
                                                                      600
tgactggcat ttcctgtggc cttctagcct cagtcgatgc cctgaccttt ggtcagttct
                                                                      660
ctgagtacgg agcccgctgg gagacggggc taggctgccg ggccactggc ttcctggcag
                                                                      720
tacttgggtc ggaggcatcg gtgctgctgc tcactctggc cgcagtgcag tgcagcgtct
                                                                      780
eegteteetg tgteegggee tatgggaagt ceeeeteeet gggeagegtt egageagggg
                                                                      840
tectaggetg cetggeactg geagggetgg eegeegeact geeeetggee teagtgggag
                                                                      900
aatacggggc ctccccactc tgcctgccct acgcgccacc tgagggtcag ccagcagccc
                                                                      960
tgggcttcac cgtggccctg gtgatgatga actccttctg tttcctggtc gtggccggtg
                                                                     1020
ectacateaa actgtactgt gacetgeege ggggegaett tgaggeegtg tgggaetgeg
                                                                     1080
ccatggtgag gcacgtggcc tggctcatct tcgcagacgg gctcctctac tgtcccgtgg
                                                                     1140
cettecteag ettegeetee atgetgggee tettecetgt caegeeegag geegteaagt
                                                                     1200
ctgtcctgct ggtggtgctg cccctgcctg cctgcctcaa cccactgctg tacctgctct
                                                                     1260
```

```
tcaaccccca cttccgggat gaccttcggc ggcttcggcc ccgcgcaggg gactcagggc
                                                                1320
                                                                1380
ccctagccta tgctgcggcc ggggagctgg agaagagctc ctgtgattct acccaggccc
tggtagcctt ctctgatgtg gatctcattc tggaagcttc tgaagctggg cggccccctg
                                                                1440
ggetggagac ctatggette cecteagtga cecteatete etgteageag ceaggggeee
                                                                1500
ccaggctgga gggcagccat tgtgtagagc cagaggggaa ccactttggg aacccccaac
                                                                1560
cctccatgga tggagaactg ctgctgaggg cagagggatc tacgccagca ggtggagget
                                                                1620
tgtcaggggg tggcggcttt cagccctctg gcttggcctt tgcttcacac gtgtaaatat
                                                                1680
coctoccat tottototte coctototte cotttoctot eteccoctog gtgaatgatg
                                                                1740
getgetteta aaacaaatae aaccaaaaet cageagtgtg atetatagea ggatggeeca
                                                                1800
gtecetgget ceaetgatea ecteteteet gtgaccatea ecaaegggtg ectettggee
                                                                1860
tggctttccc ttggccttcc tcagcttcac cttgatactg ggcctcttcc ttgtcatgtc
                                                                1920
tgaagctgtg gaccagagac ctggactttt gtctgcttaa gggaaatgag ggaagtaaag
                                                                1980
acagtgaagg ggtggagggt tgatcagggc acagtggaca gggagacctc acagagaaag
                                                                2040
2100
attaatettg acatatgeea tgeataaaga etteetatta aaataagett tggaagagaa
                                                                2160
aaaaaaaa
                                                                2168
```

```
<210> 5329
<211> 1116
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)...(284)
<223> similar to gi3413896 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5329
aatacatgtc ccctagcctt tgaccactgt cagccacctg tgtcccttga gccttcgggt
                                                                       60
etteactice cactiggaca teactgetgg acatteceat egagatgaca cetgggttee
                                                                      120
aatcccagct ctgcctttga agcacttgcg gccaccgtca agtccctttg ctctcggacc
                                                                      180
ctgggtttct catcctttaa tgaggtgggt tcagaagctc tcccatcttc acagcaaccc
                                                                      240
tggcactggc ttctcaatgg gagggaagca gcagagaaac tgaagtgtta gacactatqt
                                                                      300
gtcccaccac cccattacag agacatatga caatgttcag caggtcatct ttaatgcaga
                                                                      360
ggaggagatg ggatgteact egetgtetgg aggeaegtgg gtggtgtgeg ggeeeteact
                                                                      420
ggccagcctc tgggtggccc cgcctatccc agtatgaacg tagccaactc aagccctcta
                                                                      480
ctgtgtctca gcccacgaag cctttgtagc cttcatcttc cagcagttga aacagatagg
                                                                      540
ggaaattcag ctctccgggg ctgctgggct cccctcgacc tgggacctgt gccacctgca
                                                                      600
catgoccaac aatgggcagg aactcccgga tgtttcctgt caggttccca tccatgatct
                                                                      660
gccagtggaa tatgtccatt tgtaattgga ggttgggtct tcctaccttc tgtaagatgg
                                                                      720
etgeegeetg etggggegtg teeaggaagt aetgggggte agtgatgegg gtgttgatgg
                                                                      780
gctccagcag tcccacgagg tcctcctgag ccaaaacccc agctgcatgc ctcaggttct
                                                                      840
ccagaaaaac ggcctccatc tcagccttga ctgctattcg atcagctccc tggggtactc
                                                                      900
ggccagccat caggtggatc atgtccagcc tcaggaacgc tgccaaatac accaggcctc
                                                                      960
ctcttgccac agcaccettg caaggaacac tcaacttcct gcccatcaag caatgcccac
                                                                     1020
teegeaegge etgeteeagt eestetegga aggeegeatg teteeegggg aeggeaecea
                                                                     1080
gccccatttc ccccttctct tggtctcccg ggggcg
                                                                     1116
```

```
<210> 5330
<211> 4880
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3885)
<223> similar to gi4678724 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5330
atgtteeget teeetatggg geteetgett ggetetgtge teetggtgge tteggeeeea
                                                                       60
gccactctgg agcctcccgg ctgcagcaac aaggagcaac aggtcactgt cagccacacc
                                                                      120
tacaagatog atgigoccaa giotgeotig giioaggiig acgoigacco icagoccoto
                                                                      180
agtgacgatg gggcttcgct cttggccctg ggggaggcca gggaggaaca gaacatcatc
                                                                      240
ttcaggcaca acatccgcct tcagacgcca cagaaggact gcgagttggc aggcagtgtc
                                                                      300
caggacetee tggcccgggt gaagaagetg gaggaagaga tggtggagat gaaggaacag
                                                                      360
tgtagtgccc agcgctgctg ccagggagtc actgatctaa gccgccactg cagcggccac
                                                                      420
gggacettet ceetggagae etgeagetge caetgegaag agggeaggga gggeeeegee
                                                                      480
tgcgagcgge tggcetgece cggggcgtge agcggccacg ggcgttgcgt ggacgggcgc
                                                                      540
tgcctgtgcc atgagcccta cgtgggtgcc gactgcggct acccggcctg ccctgagaac
                                                                      600
tgcagcggac acggcgagtg cgtgcgcggc gtgtgccagt gccacgaaga cttcatgtcg
                                                                      660
gaggactgca gcgagaagcg ctgtcccggc gactgcagcg gccacggctt ctgtgacacg
                                                                      720
ggcgagtgct actgcgagga gggcttcaca ggcctggact gtgcccaggt ggtcacccca
                                                                      780
cagggeetge agetgeteaa gaacaeggag gattetetge tggtgagetg ggageetee
                                                                      840
agccaggtgg atcactacct cctcagctac tacccctgg ggaaggagct ctctgggaag
                                                                      900
cagatecaag tgeecaagga geageacage tátgagatte ttggtttget geetggaace
                                                                      960
aagtacatag tcaccctgcg taacgtcaag aatgaagttt ctagcagccc acagcatcta
                                                                     1020
cttgccacca cagaccttgc tgtgcttggc actgcctggg tgacagatga gactgagaac
                                                                     1080
tecettgaeg tggagtggga aaaceeetca actgaggtgg actactacaa getgegatat
                                                                     1140
ggccccatga caggacagga ggtagctgag gtcactgtgc ccaagagcag tgaccccaag
                                                                     1200
agccgatatg acatcactgg tetgeacccg gggaetgagt ataagateac ggtggtgeec
                                                                     1260
atgagaggag agetggaggg caageegate eteetgaatg geaggacaga aattgacagt
                                                                     1320
ccaaccaatg ttgtcactga tcgagtgact gaagacacag caactgtctc ctgggaccca
                                                                     1380
gtgcaggctg tcatagacaa gtatgtagtg cgctacactt ctgctgatgg ggacaccaag
                                                                     1440
gaaatggcag tgcacaagga tgagagcagc actgtcctga cgggcctgaa gccaggagag
                                                                     1500
gcatacaagg tctacgtgtg ggctgaaagg ggcaaccagg ggagcaagaa agctgacacc
                                                                     1560
aatgeeetca cagaaattga cageecagea aacetggtga etgacegggt gaetgagaat
                                                                     1620
accgccacca tetectggga eccggtacag gecaccattg acaagtacgt ggtgegetac
                                                                     1680
acctetgetg acgaccaaga gaccagagag gttetggtgg ggaaggagca gagcagcact
                                                                     1740
gtcctgacag gcctgaggcc aggtgtggag tacacagtgc atgtctgggc ccagaagggg
                                                                     1800
gaccgagaga gcaagaaggc tgacaccaac gcccgacag atattgacag ccccaaaaac
                                                                     1860
ctggtgactg accgggtgac agagaatatg gccacggtct cctgggaccc ggtgcaggcc
                                                                     1920
gccattgaca agtacgtggt gcgctacacc tctgctggtg gagagaccag ggaggttccg
                                                                     1980
gtggggaagg agcagagcag cacagtcctg acaggcctga gaccgggtat ggagtacatg
                                                                     2040
gtgcacgtgt gggcccagaa gggggaccag gagagcaaga aggccgacac caaggcccag
                                                                     2100
acagacattg acagececca aaacetggtg accgaceggg tgacagagaa tatggecact
                                                                     2160
gtctcctggg acceggtgcg ggccaccatt gacaggtatg tggtgcgcta cacctctgcc
                                                                     2220
aaggacggag agaccaggga ggttccggtg gggaaggagc agagtagcac tgtcctgacg
                                                                     2280
ggcctgaggc cgggtgtgga gtacacggtg cacgtgtggg cccagaaggg ggcccaggag
                                                                     2340
```

```
agcaagaagg ctgacaccaa ggcccagaca gacattgaca gcccccaaaa cctggtcact
                                                                     2400
gactgggtga cagagaatac agccactgtc tcctgggacc cggtgcaggc caccattgac
                                                                     2460
aggtatgtgg tgcactacac gtctgccaac ggaggacca gggaggttcc agtggggaag
                                                                     2520
gagcagagca gcactgtcct gacgggcctg aggccgggca tggagtacac ggtgcacgtg
                                                                     2580
tgggcccaga aggggaacca ggagagcaag aaggctgaca ccaaggccca gacagaaatt
                                                                     2640
gacggcccca aaaacctagt gactgactgg gtgacggaga atatggccac tgtctcctgg
                                                                     2700
gacceggtte aggecaccat tgacaagtac atggtgeget acacetetge tgacggagag
                                                                     2760
accagggagg ttccggtggg gaaggagcac agcagcactg tcctgacggg cctgagacca
                                                                     2820
ggcatggagt acatggtgca cgtgtgggcc cagaaggggg cccaggagag caagaaggct
                                                                     2880
gacaccaagg cccagacaga actcgaccct cccagaaacc ttcgtccatc tgctgtaacg
                                                                     2940
cagtetggtg geatattgae etggaegeee ceetetgete agateeaegg etacattetg
                                                                     3000
acttaccagt tcccagatgg cacagttaag gagatgcagc tgggacggga agaccagagg
                                                                     3060
tttgcgttgc aaggccttga gcaaggcgcc acctaccctg tctcccttgt tgcctttaag
                                                                     3120
ggtggtcgcc ggagcagaaa tgtatccacc acceteteca cagttggtge cegtttecca
                                                                     3180
caccettegg actgeagtea ggtteageag aacageaatg cegecagtgg tetgtacace
                                                                     3240
atctacctgc atggcgatgc cagccggccc ctgcaggtgt actgtgacat ggaaacggac
                                                                     3300
ggaggtggct ggattgtctt ccagaggcgg aacactgggc agctggattt cttcaagcga
                                                                     3360
tggaggaget atgtggaagg etttggggae eccatgaagg agttetgget tggaettgae
                                                                     3420
aagetacaca aceteaceae eggeaeteea gegeggtatg aggtgagagt ggatttacag
                                                                    -3480
actgccaatg aatctgccta tgctatatat gatttcttcc aagtggcctc cagcaaggag
                                                                     3540
cggtataagc tgacagttgg gaaatacaga ggcacggcag gggatgctct tacttaccac
                                                                     3600
aatggatgga agtttacaac ttttgacaga gacaacgata tcgcactcag caactgtgcc
                                                                     3660
ctgacacatc atggtggctg gtggtataag aactgccact tggccaaccc taatggcaga
                                                                     3720
tatggggaga ccaagcacag tgagggggtg aactgggagc cttggaaagg acatgaattc
                                                                     3780
tecatteett aegtggagtt gaaaateege eeteatgget acageaggga geetgteetg
                                                                     3840
ggcagaaaga agcggacgct gagaggaagg ctgcgaacgt tctgatggcc cgtgtgagca
                                                                     3900
gtcctcgcag gagacaccac cagctgtggc agcttggggc ggggtgggta gtggtcactg
                                                                     3960
eggtetggga gtgeteagat agecegeaga acaaateatg teaceaaget teaagecatg
                                                                     4020
gaggtteett eeeteteace tgeatttttg eeegtettta tgagggtett gaaaatcaaa
                                                                     4080
atagtagttg cacagtatgt gtaggaaaga cagtactgga acggcaaggt ttctcagctt
                                                                     4140
atcttcagca acatatatac tggattaggg caagagaagg aatcacccag cacttcacca
                                                                     4200
gttggaaatc tctggaaatt tacatctatg tatttaaagt tctgctaatg caaatctttt
                                                                     4260
ctctggaaag aagcacagag gaggagtttt gatgacccag gggttagggc tgagacaacc
                                                                     4320
ggacgtttgt cacctccttt cccattgggt ttttaggaaa acagtgtgaa cctcccctt
                                                                     4380
ttaatttctg gtgttatgag gaagaataaa ggggataaaa ggggctaaga tggactcatg
                                                                     4440
tttagctaag ttctgacttg tatccagcat gctggagacc aaagctgccg ccttactgct
                                                                     4500
atttttaagt geeetetttt cagteatttg cataattgeg tecatagage tgeatatgtt
                                                                     4560
gtgaataaat teteacteat tteaactttg aataatttga etgtettgat aattggttee
                                                                     4620
teccaaagae tettetgeaa eteccattea tgeecaceag geeteagaet ecetettte
                                                                     4680
ecegecetge actattggag ecetgggttt tgtgggagtg eteageaceg tgagtettae
                                                                     4740
tgtttgatcg gadagttagc aagatcagat cctttttgct tattttctat cactttggag
                                                                     4800
ggttttctgt agcaaaatca gtgaccaatg aagtaactta aattcctatt gaagaacaaa
                                                                     4860
aataataaac cacttgattt
                                                                     4880
```

```
<210> 5331
<211> 831
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (28)...(301)
<223> similar to gi19923 in the genepept database release 114,
```

# Run with FASTXY 3.3t00, default parameters

```
<400> 5331
cactagteca gegtggtgga attececaga tgececteag tecegtttet eeccagatee
                                                                       60
acacctggcc etececetee tgttecagaa tgcageccag eccetetgce atectgteet
                                                                      120
cctagcccgt ggtctccctc cacacacgcc agtccaggct ccttcccttg gtgcctgacc
                                                                      180
cetectgget gecageagee ceettetgge cactgeecae tgagggaggg ggetteetet
                                                                      240
tacccetece cageetggge caetgggeet ggtactgagg acetegetge caececacee
                                                                      300
cactetgeca tgetaegggg ggtggggggg eggteagtge atgetgttee tagtetgaaa
                                                                      360
cttgtgtcct gtgggtgcct ggtggggaac ccttgcggga aggcctggtg ggtttgtccc
                                                                      420
tgcttcccag ccagectgtg tccccgggta tgggctgggg tctggcatgg gcctctgcag
                                                                      480
ctggccacag actgaggggc tccaaacagc actgggaaca gcctcagggt atctggttgg
                                                                      540
gggctgcaga caggggtggg gtcttctgct tggccttgac aggttgcagg caggttgtca
                                                                      600
geoggatetg caateteatg ggggettggg gtetteeegg eteatgaggt tatggeagaa
                                                                      660
ttcagetcet ggtggctggg gactgggtcc cacetcectg ctggctgttg gccettccca
                                                                      720
geatggeggt tgetteeect teagggeeag caggaetgge etgaatttet ecetatetgg
                                                                      780
cgttgaaaca ccctcaatga gctaaccctc ctccaccagg cccccacctg g
                                                                      831
```

```
<210> 5332
<211> 1035
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (923)...(716)
<223> similar to gi297157 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5332
ttttttttt ttcaaatggc caaaagcaat ttaatttttg gaggaaaaac tgcataccca
                                                                       60
gtacaactta tatctcaggc gaaatgtctc aaaatcttcc tgctcattgg acaaaaactc
                                                                      120
agetteacea cattgecage egggagacea tgaaagggaa etggegecae tgececeage
                                                                      180
tgcccttccc aggggcgaac ttcaccaaga tgtggaaatc ctgggcccac cccacagtca
                                                                      240
gtcategete catttettee tggcaceace acetecatet ggcetgetee ecaaceeece
                                                                      300
agaagcaggt gggcccaggc tccaggccag tgcccccatc aagatcagac gtaaggcatc
                                                                      360
ttcccaccgt cgctgtgctg cggggacttt tccaatcctt ccttcctctc tgtccagagg
                                                                      420
ctgccaggct gagggggcca ccgtccaggt ggaacaggca caggcatcgg ggaatcagat
                                                                      480
ggtatcagtg gggatagggc acagcacttt cctgggagcc atgtgacgcc agatcttcct
                                                                      540
ctggcagttc ccactggctg tgggaagtgg ttttcataaa gggggccaac ttccaggaac
                                                                      600
atctagggct cgggagcaac ccagcattga cagtgaatca gaatccacct agagctggcc
                                                                      660
atggcccagg cagggggtgt cttccccaca gcccccagga gtggctgcac ctagtgggcg
                                                                      720
cagcatttgg cctgcctcgc gggccccttg ttcagagcca cagctgcatc cccccgtaga
                                                                      780
gcctggccct cctcgtcgct tctctgcagt agctcttggg ccactgtatt gaacacctcc
                                                                      840
gacacctggt ggttcagttt ggccgaagtt tccatgaaca gcaacttctg gctgtcggca
                                                                      900
aactccttcc cttcctgaag gaaacagcca caaaatccag cgctgtttat aagagagttt
                                                                      960
cctaaggaca cctggttcac ttccaacagt aagatccgag aaagctgcag ccgtggagcc
                                                                     1020
```

```
<210> 5333
<211> 1200
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (8)...(716)
<223> similar to gi2507613 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5333
ctacagetca egeategtgg gtggaaacat gteettgete tegeagtgge eetggeagge
                                                                       60
cageetteag ttecaggget accacetgtg egggggetet gteateaege eeetgtggat
                                                                      120
catcactgct gcacactgtg tttatgactt gtacctcccc aagtcatgga ccatccaggt
                                                                      180
gggtctagtt tccctgttgg acaatccagc cccatcccac ttggtggaga agattgtcta
                                                                      240
ccacagcaag tacaagccaa agaggctggg caatgacatc gcccttatga agctggccgg
                                                                      300
gccactcacg ttcaatgaaa tgatccagcc tgtgtgcctg cccaactctg aagagaactt
                                                                      360
ccccgatgga aaagtgtgct ggacgtcagg atggggggcc acagaggatg gagcaggtga
                                                                      420
egecteeect gteetgaace aegeggeegt ceetttgatt tecaacaaga tetgeaacea
                                                                      480
cagggacgtg tacggtggca tcatctcccc ctccatgctc tgcgcgggct acctgacggg
                                                                      540
tggcgtggac agctgccagg gggacagcgg ggggcccctg gtgtgtcaag agaggaggct
                                                                      600
gtggaagtta gtgggagega ceagetttgg categgetge geagaggtga acaageetgg
                                                                      660
ggtgtacacc cgtgtcacct ccttcctgga ctggatccac gagcagatgg agagagacct
                                                                      720
aaaaacctga aaaggaaggg gacaagtagc cacctgagtt cctgaggtga tgaagacagc
                                                                      780
degatected detggaeted egtgtaggaa detgdacaeg agdagacaed ettggagete
                                                                      840
tgagttccgg caccagtagc aggcccgaaa gaggcaccct tccatctgat tccaqcacaa
                                                                      900
ccttcaagct gctttttgtt ttttgttttt ttgagatgga gtctcgctct gttgcccagg
                                                                      960
ctggagtgca gtggcgaaat ccctgctcac tgcagcctcc gcttccctgg ttcaagcgat
                                                                     1020
tetettgeet eagetteece agtagetggg accaeaggtg eeegeeacea eacceaacta
                                                                     1080
atttttgtat ttttagtaga gacagggttt caccatgttg gccaggctgc tctcaaaccc
                                                                     1140
ctgacctcaa atgatgtgcc tgcttcagcc tcccacagtg ctgggattac aggcatggc
                                                                     1200
```

```
<210> 5334
<211> 3156
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3139)...(2740)
<223> similar to gi4150963 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5334 60 aacaccaggg tttttcccaa accccagggt gttaaaaccc ggcccccgga atttattttg 120 gggggcccta aaaaaaacct ttattttccc aaccccggtt attaaaaatg aaacctttta 180 aagggccccc cccttttttt tttttggcta agttgccctt tattaacgaa aacatagagc tttcggtcaa ttccaccacg gagaacacaa accagagata aaacccacac caagggctat 240 300 ttcccaagct ggggaatttg agaacacacg ggcagagttc acgccacaca actacactgg 360 getegteett gggaggegtt cacaggaage aateaegage geeaageeae ceacaaggea gtgcggcaag gctcccggga tccttacagg catccaagcg aggtacagaa acctccacag 420 cagtggggat aaggggaaaa tattttctct tgctaaagaa tatccttagt tctcaacata 480 540 aacatgacta cgtatatatt cagcttcaaa tgaaaaacaa gtttacaaat cactactgga 600 tacttaaact ctatgttgct tttctttttg gcagcaccag cctaaactct gtgggtttgc 660 aatatttcag aaacttcagg tacattacag tcttctgaga aaggcccaga acttcagaat 720 teetggageg getgtgaaga aagaacatta etggeaacaa atattaaaae aacattteaa 780 gaactccaag aatacactga gaggtttgta aaggtgcaca tatttaagca ttcaagctat 840 atcctaaatc atttttctgt taacgtattt atttttggct taggaaaaac atgtacttta 900 ttggcaaatt gttttagctg tagacggatg gatgattcta cagccacact cccctttccg ggtgtacatc cggggcctgt gcacctgcgc ggaatcaggc aactttgttt ttcccggtcc 960 ccaaaaagct cacctttgac acacceteta tatgcacagg aaaactgete ttettattca 1020 1080 gggtctcttt ttgtggtgga attcagagaa actgggttgc aacatctttt tagggagagg tegagtatgt ttttteatte gagtgaetet geatgettaa ggaatetgag teggtataaa 1140 ggactagacc actgaattgc gtacagegtc ccaggatgcc tgcagcccca gagtacaaac 1200 tgtagatget etegtggeet gaatgtggaa ttttacecae cagaaageat taetggagee 1260 caaactggca actttaaata gctcaatgat atcggtacct tcccctttgg tttcaaaagc 1320 aatcatgacc gaacattttc aactgtgagg caaagctgac ttgcatacca aaaaacacct 1380 ttccaaaaac attcaatgag gtagctcaga tcaattatca aacccaagtg aataccaaga 1440 1500 agettaataa atgeteagge attttaaaat geaaattget acagtgeeta ataaatgete tttetteeca attettgeag gtgeatgeaa atgttgagga ggageecetg caaagtgagg 1560 1620 acagcgagag gctgggagtg aatgaagctg gcaaggagca gagaggaggg ggtgccctgg ggcacccaac ttaggctaaa gtgcgcctgc ccaccacaga gctcaagtgc aatcagctcc 1680 agagaacaaa caccaagtag aactcagggc tcgatgggct gaaaagtggc cttgactcaa 1740 ggcgctaggg aaccctcagc ctggtgcatt cacattgaga tggaggcaat ctaagatact 1800 tecettaaat getgagttgg tataaagtge tggeecaetg gaecagetea gggeagtete 1860 teaegtttte cagggeecea gageeaeeet eeetetagag gagtetggee eetgttgeee 1920 ccaccacacc accetgggtg ggttetggga gaggecatge tettagecac tegteceetg 1980 agtteteaeg gtetgeteag aggeaeagae tgetetttge tgggtagett tteggaggte 2040 gageteaaat geetteeatg tggagtettg gacaaaggga aaggtggeea caceaaceeg 2100 ggcagcaata tgaattetgt gacttecage agtaagaaag agtteacaca cacacaaaca 2160 ttcatgtgca cagacacttt cacaacatac acacatgtac acacttaggt gcacataccc 2220 2280 teacteacae aggeacaeae atgeateeae ttagteacee acaeacaagt geacteacae acacgcacgt gcacagagca gtgcacagcc actgggcaac atccccgggg gcagcaagct 2340 2400 caggtgcagc cagggtaggg gtgggcggag tgcaggggcc tggagcaggg ctgggcggtg ttgcttgggg gaaggageee tegeeeeace tegeeetgge tateteeett teetgteete 2460 2520 ateggeeace accaeegeac eeetgeeeag eegggeacae tgaagacaag cagtgggaag 2580 gaaggcagca ggtcgcttgc gttaggtctc cgtcgtataa ttatcgtagg tcagcggagc cagtgccgga aaactgctcc accgcctggc gccgggatgg ggctctgtgc gcccttgctc 2640 cttatattta cccagaatgt ttttggcttc ttctgcatcc tgcaaagggc tctctccata 2700 ttetteette agecactgee gatactgatg gaceteatge ttetcaaact cetggagetg 2760 tetetggaag eccaegttgg ggttggeaca ggateteeca geaegeaegg tgtgeaggge 2820 atcctcccag ccaaagtcag tgacggtcat gatgtatgcg atcaccagtg tcacgctcct 2880 ggagaccccg gccaggcagt gtacaaggca gctctcaccg cggagccggc actcgtgaat 2940 gaatttaata etttetttga aatgtettgt eaggttttga gatggtgaat eegetgetgg 3000 gatgcacagg tatttaactc cctccaacat aggcctggca ctatcgtgga cagacagaat 3060 atgtgtcacc ttgttcttgc tcaattgttc cgcgtctctg gcatctttga agttgccgat 3120 gtacaggccg ggcaggatct tgttcatccc attccc 3156

```
<210> 5335
<211> 1757
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1742)...(1110)
<223> similar to gi3881304 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5335
ttttttttt ttcagagctt aaaaaccaaa aggcagaaaa tagactttat tccaagacag
                                                                       60
atttgtaaaa gatgttttta aagggaaagg caagtcacgc tactaaatca aacattgttc
                                                                      120
acaatttctg gatcttcctc ctccgcctgg cactgcagct gagccttggc ggatatgctc
                                                                      180
ggggccctcg gcgcagagga acttagcctc gattctcttc ctgaggggct tcttaacttt
                                                                      240
tccaagccag gcagtgagcg tggtgggagg ctggggctgg tgcctgcgga cagctccaga
                                                                      300
tggaatecca ggccacggtg cttctagtgt ccccccagcg agettgcggt gtggcaggcg
                                                                      360
gccaggaagg gccatgagca gggtggcctg aatgaaaacc gagggccgaa gccagcctga
                                                                      420
ctecetegee taagetgggg eteggteega ggeacaegea tggeettgge cagacaeaa
                                                                      480
ccaagagact gccatgacag acagagcaga aacctcccga gcactgtgtt caagctaagc
                                                                      540
tttcctaaga cgggcttctc aggcgagacg tgacaccaga caccgtcgca tgttacttgg
                                                                      600
agagaacaga gacgtgcggg ccacagcggc ccaccaaagg ctgccatcca agctgagttc
                                                                      660
egeaggeete acetgeaget ggagagggae ettgeeetga teeteetggt aggtaeeege
                                                                      720
taagggattc aggacagagc gtcacactgc acgcagggtc ctccgccacc accatccaag
                                                                      780
aaccccgggg ggctggccac gcgctggcct ctgccaagga gtgccagtgg ttcccgggac
                                                                      840
ggggccgccc aagcaggtga gggaggttta gatgaatgac ttggccaggg tcaccatgtg
                                                                      900
gtccacgcca catgccacgt ccacaggctc cccaggcatc gtcaccctcc atgggaaata
                                                                      960
ctggtcctcc aggcgaccga ttcccaggca ccctcggatg ttcttgcccc atacaaacag
                                                                     1020
ctctcctttg ttggtcagtg cagcaaagtg gctgagtcca catcggatgc gggaaacctg
                                                                     1080
gatttctggg ttgaactccg tcaagccaaa gagagtgggt ggaatcattt cagggacggc
                                                                     1140
actitecact aggittggac cttteccaag aattecatag ceccagacaa aaacatgtee
                                                                     1200
tteteegttt aacaetgeae ageeegtgee acegeatgea geetgtegea eetteeeeae
                                                                     1260
tcctgagaag tgtaagcagc ggggcacatt cacctgtgtg gagtcagtga cagaggccag
                                                                     1320
ctgcaggtac tccgagtttc cccaaccaaa aagtcctccg tcggcggaca cggccaggca 1380
gcaatcaccg taggtggcaa cttggataac gttcactccc gccaggtctc cacccagctt
                                                                     1440
ggtgggcgag ctggtgatat tgtagtgacc cagacctgtt tgcccatcag caccccatcc
                                                                     1500
acaagaatag actteteett tateegteag gaacagaeta tgateetgae cacaggegae
                                                                     1560
ctggaccacc tggccatcga agtcctgcat cctgtggact ctgtgacttt cactgtaaat
                                                                     1620
ttcattttcg accacctttc ttccacattg cccataagaa ttgtttccca tgctgaagac
                                                                     1680
tecttecetg teagteaaca caagagagtg ageteggeeg caggagaett geageaceeg
                                                                     1740
tgtctcctga ggtctgt
                                                                     1757
```

<210> 5336 <211> 459

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (29)...(368)
<223> similar to gi1370190 in the genepept database release 114,
   Run with FASTXY 3.3t00, default parameters
```

## <400> 5336 tctagtccag cgtggcggaa ttccagatgg tgtcatcgtc atgtacgatc tcacagacaa 60 gcagtegtte etgteggtee ggeggtgget gageagegtg gaggaagetg tgggagaeeg 120 ggtgcctgtt cttctgctgg gtaataagct tgacaacgag aaggagcggg aagtcccccg 180 gggcctcgga gagcagcttg ccacggagaa caatctgatc ttctatgaat gcagcgccta 240 ctctggtcac aacaccaaag agtccctgct ccatctggcc aggttcctca aggagcaaga 300 agacacagtg agagaggaca ccattcaggt cggccaccct gctaagaaga aatcctgctg 360 tggctgatag ggtcctacaa ggactgcccc cagcaaacct gaggtcacag agcctgccct 420 gatectgeac aeggeteetg cacagatgee acceaeegg 459

```
<210> 5337
<211> 1885
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (27)...(1513)

<223> similar to gi436480 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5337
attgatcacg ttggaggaat tcgcgtgact acgtgcgcca gacgtggaag ctggagggcg
                                                                       60
aggccctgga gcaggccatc atcagccagg ccccgcaggt ggagaagctc attgctacga
                                                                      120
cggcccacga gcggatgccc tggtaccaca gcagcctgac gcgtgaggag gccgagcgca
                                                                      180
aactttactc tggggcgcag accgacggca agttcctgct gaggccgcgg aaggagcagg
                                                                      240
gcacatacgc cctgtccctc atctatggga agacggtgta ccactacctc atcagccaag
                                                                      300
acaaggeggg caagtactge attecegagg geaceaagtt tgacaegete tggeagetgg
                                                                      360
tggagtatct gaagctgaag gcggacgggc tcatctactg cctgaaggag gcctgccca
                                                                      420
acagcagtge cagcaacgee teaggggetg etgeteecae acteecagee cacceateca
                                                                      480
cgttgactca tcctcagaga cgaatcgaca ccctcaactc agatggatac acccctgagc
                                                                      540
cagcacgcat aacgtcccca gacaaaccgc ggccgatgcc catggacacg agcgtgtatg
                                                                      600
agagececta cagegaecea gaggagetea aggacaagaa getetteetg aagegegata
                                                                      660
acctecteat agetgaeatt gaaettgget geggeaaett tggeteagtg egeeagggeg
                                                                      720
tgtaccgcat gcgcaagaag cagatcgacg tggccatcaa ggtgctgaag cagggcacgg
                                                                      780
agaaggcaga cacggaagag atgatgcgcg aggcgcagat catgcaccag ctgqacaacc
                                                                      840
cctacatcgt gcggctcatt ggcgtctgcc aggccgaggc cctcatgctg gtcatggaga
                                                                      900
tggctggggg cgggccgctg cacaagttcc tggtcggcaa gagggaggag atccctgtga
                                                                      960
```

```
gcaatgtggc cgagctgctg caccaggtgt ccatggggat gaagtacctg gaggagaaga
                                                                     1020
actitigigea cegigaectg geggeeegea aegieetgei ggitaaeegg cactaegeea
                                                                     1080
agatcagega etttggeete tecaaageae tgggtgeega egacagetae tacaetgeee
                                                                     1140
getcagcagg gaagtggccg ctcaagtggt acgcacccga atgcatcaac ttccgcaagt
                                                                     1200
tetecageeg cagegatgte tggagetatg gggtcaccat gtgggaggee ttgteetacg
                                                                     1260
gccagaagcc ctacaagaag atgaaagggc cggaggtcat ggccttcatc gagcagggca
                                                                     1320
ageggatgga gtgeccacca gagtgtecac eegaactgta egeacteatg agtgaetget
                                                                     1380
ggatctacaa gtgggaggat cgccccgact tcctgaccgt ggagcagcgc atqcqaqcct
                                                                     1440
gttactacag cctggccagc aaggtggaag ggcccccagg cagcacacag aaggctgagg
                                                                     1500
etgeetgtge etgageteee getgeeeagg ggageeetee acgeeggete tteeceacee
                                                                     1560
teageceeae eccaggicet geagtetgge tgageettge tiggitgiet ecacacacag
                                                                     1620
etgggetgtg gtagggggtg teteaggeea caeeggeett geattgeetg eetggeeeee
                                                                     1680
tgtcctctct ggctggggag cagggaggtc cgggagggtg cggctgtgca gcctgtcctg
                                                                     1740
ggctggtggc tcccggaggg ccctgagctg agggcattgc ttacacggat gccttcccct
                                                                     1800
gggccctgac attggagcct gggcatcctc aggtggtcag gcgtagatca ccagaataaa
                                                                     1860
cccagcttcc ctcttgaaaa aaaaa
                                                                     1885
```

```
<210> 5338
<211> 1060
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(659)
<223> similar to gi5817223 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5338
eccageetet geeeggggea eeeeggeett eeaggeaege egggeeaeea tqqeaqeeaq
                                                                       60
ggettgeegg geegegatgg eegegaegge egegaeggeg egeeegggge teegggagag
                                                                      120
aaaggcgagg gcgggaggcc gggactgccg ggacctcgag gggaccccgg gccgcgagga
                                                                      180
gaggegggae eegeggggee caeegggeet geeggggagt geteggtgee teegegatee
                                                                      240
geetteageg ceaagegete egagageegg gtgeeteege egtetgaege accettgeee
                                                                      300
ttegacegeg tgetggtgaa egageaggga cattaegaeg eegteaeegg caagtteaee
                                                                      360
tgccaggtgc ctggggtcta ctacttcgcc gtccatgcca ccgtctaccg ggccagcctg
                                                                      420
cagtttgatc tggtgaagaa tggcgaatcc attgcctctt tcttccagtt tttcgggggg
                                                                      480
tggcccaage cageeteget eteggggggg gecatggtga ggetggagee tgaggaecaa
                                                                      540
gtgtgggtgc aggtgggtgt gggtgactac attggcatct atgccagcat caagacagac
                                                                      600
agcaccttct ccggatttct ggtgtactcc gactggcaca gctccccagt ctttgcttag
                                                                      660
tgcccactgc aaagtgaget catgetetea etectagaag gagggtgtga ggetgacaac
                                                                      720
caggicatec aggaggetg geceeetigg aatatigtga atgactaggg aggitgggta
                                                                      780
gagcactete egteetgetg etggcaagga atgggaacag tggetgtetg egatcaggte
                                                                      840
tggcagcatg gggcagtggc tggatttctg cccaagacca gaggagtgtg ctgtgctggc
                                                                      900
aagtgtaagt cccccagttg ctctggtcca ggagcccacg gtggggtgct ctcttcctgg
                                                                      960
tectetgett etetggatee tecceacee etectgetee tggggeegge cettttetea
                                                                     1020
gagatccact caataaacct aagaaccctc aaaaaaaaa
                                                                     1060
```

```
<210> 5339
<211> 2481
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (500)...(848)
<223> similar to gi5668598 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5339
tggcgaattc attatagacg tgagccatca cacccagcca cagtttgaga ctttatgatt
                                                                    60
taggcagtgc aaagcctttg aaaaaactgg atcaagtttt tacggaggtt ggtgagttgg
                                                                   120
tgctatgcaa aatgaatttg gaggggtaag agacaaagca aggagaacat tcggaaggct
                                                                   180
tttgcagtag agaacagget aaatataagg aagacetgaa ttagaattge ggaggaagge
                                                                   240
atggaaaagc aagaaaaaa tcaagaacag atagggctct gactgactgg taggaaatgt
                                                                   300
aaaaaggcca tacatttatt ctgaatgttg gtatctggaa gaatggtgat gctgttcaag
                                                                   360
taataaggac aaaggggaac caggcactgt gagcctctgt ggggtgtgtt actcttttag
                                                                   420
ctcatgtgtt tcaagtcatt ctaccccttg ccgtctccac atccaaacct aactactttq
                                                                   480
gattttaatt gcageteete caececeace acetgtgate egaaatggtg ccagggatge
                                                                   540
tecceetece ceaceaceat acegaatgea tgggteagaa eeccegagee gaggaaagee
                                                                   600
cccaceteca ccetcaagga cgccagetgg gccaceceet cetectecae cgcccetgag
                                                                   660
gaatggccac agagattcta tcaccactgt ccggtctttc ttggatgatt ttgagtcaaa
                                                                   720
gtattccttc catccagtag aagactttcc tgctccagaa gaatataaac actttcagag
                                                                   780
gatatatece ageaaaacaa acegagetge cegtggagee ceaectetge cacceattet
                                                                   840
caggigaage ciggetiggi ecegiteete aggaaaagga iggaeettei ettettetea
                                                                   900
gatggtccct tccattcccc tgaaacctgc atgagagctc ctaacatgtt tctccaatgc
                                                                   960
aatcaagccc tagactccaa atgtcctccc agetcacetc catetatgca tetcatetet
                                                                  1020
ggatttggtg atcagactct atattgacag taggatctca aaccctgcat ccatccttcc
                                                                  1080
tccagcaagc cctgctagcc acatgaggaa caagtttccg tgtcttctgc cttcctcttg
                                                                  1140
gggaaaggtg cettgttgtg atgaattaac tcactgttag ggcagggtgg agaatggtac
                                                                  1200
tectteette teetgteeac tgtgggggaa gettggeagg tatattatat tteateattt
                                                                  1260
1320
aggagtttgc caagaagtga tctgttttaa aggtcatatt tggagaaagg gcaaggaatt
                                                                  1380
gggtctgctt tatttttggg ggtattttgt ttttgttctc acctgctgcc ccccacccc
                                                                  1440
accacccag ggataaattg gatataaaca ctaaatacta atcagttgaa cttaacattt
                                                                  1500
aataaaaaga aagggtgaaa taaactgaag accattttag aactagtcag ttctctgcag
                                                                  1560
caaagggaac aggagccatt tgaaccctct gggacccctc accccactgc ttcagggtgc
                                                                  1620
taggctgagg gatgtttttc ctcccctta ccgcccatgc ccttgaaaga aaagtcactt
                                                                  1680
tttgtggagg gcatcattca ttcctgattc acaaacccca aaaacctctg gtgggagata
                                                                  1740
ggaagatagg gegtgggeet gggeettaae eteaatettg tgtetgeete agtettttet
                                                                  1800
gactggccct gaagttgtca gtggctcttt ctgtccttca gcccctggaa ggtgctccag
                                                                  1860
gataacaaag aagggcaggt tgaagcccct catggaagga gctggctttg tggggctgca
                                                                  1920
aaggactttt aagteetgee tgtactgaag tteacageee acetgactga geagactett
                                                                  1980
cctgttcctt tctctaccac ccttgccttc ccaggactgc acggtttaac acagcagagt
                                                                  2040
acagaagggt gaagaagtga gcagaggctt atgaagatat tcagatactc ttctatgcca
                                                                  2100
2160
ccataggttg tttctttgtc ttccgggtcc taaagagcac agagaaaatg gaggtcccca
                                                                  2220
gtctaggtag gaagctgatt ggatgaggac ttctttttt ccgacagcag gatggggctc
                                                                  2280
ttgggctcca cacaccagat gctttggttt tctacaactg ttgctatgtg tagagggtgc
                                                                  2340
tcagagcgtg gcatgagagc aaggagacca tggctactct ttgaaatgga tggggaaaat
                                                                  2400
```

tagcttaaaa atttaatcac gagattgcgc cactgcactc cagcctgggc gacagagcca 2460 gactccgtct caaaaaaaaa a 2481

<210> 5340
<211> 442
<212> DNA
<213> Homo sapiens

<220>
<221> misc\_feature
<222> (75)...(445)
<223> similar to gill84790 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

### agaggagegg geegaggaet ceagegtgee eaggtetgge atectgeaet tgetgeeete 60 tgacacctgg gaagatggcc ggcccgtgga ccttcaccct tctctqtqqt ttqctqqcaq 120 ccaccttgat ccaagccacc ctcagtccca ctgcagttct catcctcggc ccaaaagtca 180 tcaaagaaaa gctgacacag gagctgaagg accacaacgc caccagcatc ctgcaqcaqc 240 tgccgctgct cagtgccatg cgggaaaagc cagccggagg catccctgtg ctgggcagcc 300 tggtgaacac cgtcctgaag cacatcatct ggctgaaggt catcacagct aacatcctcc 360 agetgeaggt gaageeeteg geeaatgaee aggagetget agteaagate eeeetggaea 420 tggtggctgg attcaacacg cc 442

<210> 5341
<211> 1497
<212> DNA
<213> Homo sapiens

<220>
<221> misc\_feature
<222> (983)...(1262)
<223> similar to gi495222 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5341

cggtggcatt cgttgtggag tgaatgtaag ttggacacag aaaatccctc ataatatcct 60

cctgtttggt tgtatagtgg cctatgagca gattctgtgg cttagactcc cagtcccatg 120

gttcctggct cctgatgtct tttcccataa cattttgaca ttccaacaaa ctctaattag 180

ctgaatgatc aatcacagaa atgtaaatgt agaagcgaat ttacagatca tacagctcca 240

ccctgtaaat aaaccaggat gattagggta ttcacgatat tgcagattgg ccagctcatg 300

acttgccctt tgttcctagc tctgtgcctg gcctcagagg agagccttgg tgcacgtttg 360

actttttaat ctttattga acctgttaca caccgtcacc cccactgctc tgcttgccac

```
agacatggaa ggttcactaa ggccttaagg cactcatgca agctcacaag agaaagaaat
                                                                      480
ctgtaaggca tgtagaattt ggactcaatc atgttggtct ttaatgtgcc tagagcaatg
                                                                      540
gaatgggcac tttgggggcg gtggaattca agacgctctg gctgaagatt cagaagtatc
                                                                      600
tggtaactet etttteette tgggeateet etectetgtt etaateetee ettacaetea
                                                                      660
ttcctggtcc attgtattct gaccacatcc ttaatcatgg tcaaaactat tgagtcctgg
                                                                      720
gcacattggt catgaaggaa caagaaggca atgagagact ctcatgccaa ccactgccct
                                                                      780
gaaagccctg ctgttcagac agcaaagggg ccagcactgg ccaagctctt atgcttgctc
                                                                      840
tgaaaccttc ttgggaggag tcaatagggt ctccttttga aagtgtccct ggccttttga
                                                                      900
                                                                      960
gaaagcagtg tggtggaggg agatggttct ggcaggggcc gtgaatggtt gttttctact
tgggatttct ttcctgcttt aggagatcta ttgggaaact gattataacc actcgggcac
                                                                     1020
catcgatgcc cacgagatga ggacagccct caggaaggca ggtttcaccc tcaacagcca
                                                                     1080
ggtgcagcag accattgccc tgcggtatgc gtgcagcaag ctcggcatca actttgacag
                                                                     1140
cttcgtggct tgtatgatcc gcctggagac cctcttcaaa ctattcagcc ttctggacga
                                                                     1200
agacaaggat ggcatggttc agctctctct ggccgagtgg ctgtgctgcg tgttggtctg
                                                                     1260
acceggggtt teggacatea gtgacaetee etgeceeaet gettgettet tgteaceeet
                                                                     1320
tctctacaat tttgtgaaca tttatgctcc agtggcattc actggttgtt catacctttc
                                                                     1380
ttgccctggg tctatttcag cagcactgag ctatgagcta tgtaagccga cccggtgggc
                                                                     1440
ccaagtggag ggaaagcaat caattaaagt tgtgagccag aatggtaaaa aaaaaaa
                                                                     1497
```

```
<210> 5342
<211> 1968
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (208)...(1822)
<223> similar to gi4008355 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5342
acactatett titigeaaaaa atgaaaettt taateeacat ttaaaaaataa ggetgtggga
                                                                       60
ttttggagaa gcattttaaa aacttgagga ctttatatgt tactcctggg aggttaaaca
                                                                      120
ttgtttcaga ctaatagaac tagcattatt aacgtgctga ctctaactga atttgttttg
                                                                      180
ttctctctct actaggtgat tcgtgaagct aagagaacag caccaagtat agtgtatgtt
                                                                      240
cctcatatcc acgtgtggtg ggaaatagtt ggaccgacac ttacagccac atttaccaca
                                                                      300
ttattacaga atatteette atttgeteea gttttaetae ttgeaactte tgacaaacee
                                                                      360
cattccgctt tgccagaaga ggtgcaagaa ttgtttatcc gtgattatgg agagattttt
                                                                      420
aatgtccagt taccggataa agaagaacgg acaaaatttt ttgaagattt aattctaaaa
                                                                      480
caagctgcta agcctcctat atcaaaaaag aaagcágttt tgcaggcttt ggaggtactc
                                                                      540
ccagtagcac caccacctga gccaagatca ctgacagcag aagaagtgaa acgactagaa
                                                                      600
gaacaagaag aagatacatt tagagaactg aggattttct taagaaatgt tacacatagg
                                                                      660
cttgctattg acaagcgatt ccgagtgttt actaagcctg ttgaccctga tgaggttcct
                                                                      720
gattatgtca ctgtaataaa gcaaccaatg gacctttcat ctgtaatcag taaaattgat
                                                                      780
ctacacaagt atctgactgt gaaagactat ttgagagata ttgatctaat ctgtagtaat
                                                                      840
gccttagaat acaatccaga tagagatcct ggagatcgtc ttattaggca tagagcctgt
                                                                      900
gctttaagag atactgccta tgccataatt aaagaagaac ttgatgaaga ctttgagcag
                                                                      960
ctctgtgaag aaattcagga atctagaaag aaaagaggtt gtagctcctc caaatatgcc
                                                                     1020
ecgtettaet accatgtgat gecaaageaa aattecaete ttgttggtga taaaagatea
                                                                     1080
gacccagage agaatgaaaa getaaagaca eegagtaete etgiggetig eageacteet
                                                                     1140
```

```
gctcagttga agaggaaaat tcgcaaaaag tcaaactggt acttaggcac cataaaaaag
                                                                 1200
cgaaggaaga tttcacaggc aaaggatgat agccagaatg ccatagatca caaaattgag
                                                                 1260
agtgatacag aggaaactca agacacaagt gtagatcata atgagaccgg aaacacagga
                                                                 1320
gagtcttcgg tggaagaaaa tgaaaaacag caaaatgcct ctgaaagcaa actggaattg
                                                                 1380
agaaataatt caaatacttg taatatagag aatgagcttg aagactctag gaagactaca
                                                                 1440
gcatgtacag aattgagaga caagattgct tgtaatggag atgcttctag ctctcagata
                                                                 1500
atacatattt ctgatgaaaa tgaaggaaaa gaaatgtgtg ttctgcgaat gactcgagct
                                                                 1560
agacgttccc aggtagaaca gcagcagctc atcactgttg aaaaggcttt ggcaattctt
                                                                 1620
totcagoota caccotcact tgttgtggat catgagogat taaaaaaatot tttgaagact
                                                                 1680
gttgttaaaa aaagtcaaaa ctacaacata tttcagttgg aaaatttgta tgcagtaatc
                                                                 1740
agccaatgta tttatcggca tcgcaaggac catgataaaa catcacttat tcagaaaatg
                                                                 1800
gagcaagagg tagaaaactt cagttgttcc agatgatgat gtcatggtat cgagtattct
                                                                 1860
ttatattcag ttcctattta agtcattttt gtcatgtccg cctaattgat gtagtatgaa
                                                                 1920
1968
```

```
<210> 5343
<211> 504
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (507)...(300)
<223> similar to gi4699967 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5343
gcggccgcag gagaagccgc ggttggcgca ggacgcaggt gctgtagtcg aagcgctcag
                                                                       60
gctggctggc tcgccgctgg gccagaagcc cgcactgcac aaccgtgttg cccttggaga
                                                                      120
getecaggag tgggtgggea gtggeagggt ecaaettgag aggeteeggg getggeaaaa
                                                                      180
ctttccggaa gagccttttc cacacggtca gcttgatgtc agcctggtgg aggcctggct
                                                                      240
tgaaggagat ggggctgaat gcgccttcta ggggccgggc ctgcggcatc tctgctctgg
                                                                      300
aggecatgga gtggaaette eggatgaaet tgtggtggte eteattgeeg aaetgtteea
                                                                      360
gcacacactc ggcttgggcc agccgctccc gggttccctg ggcctgctcc agctgcatgt
                                                                      420
ccagggaggc caccaggcca cgggtgtgac cccctatccc ctccaggcag cgggccttct
                                                                      480
cctcatccac caggtggtgc agct
                                                                      504
```

```
<210> 5344
<211> 929
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(464)
<223> similar to gi452987 in the genepept database release 114,
```

### Run with FASTXY 3.3t00, default parameters

```
<400> 5344
gaattccaac agccatcgca ctggactgcg acctgagggc cagccaggcc gcgctcttcg
                                                                       60
agaagaacaa ggagctggca gacctgaagc atgtgcatgg ctatctgaag aagcagttcc
                                                                      120
aggagaaggt ggcagagctg gcacatgcca accggcgggt ggagcagcac gaggctgagg
                                                                      180
tgaagaaget geggetgegg gtggaggage teaagaagga getggeecag getgaggaeg
                                                                       240
agctggacga ggcccacaac caggcacgta agctgcagcg gtcgctggac gagcagacgg
                                                                      300
agcagagega gaacetgeaa gtgeaaetgg agcacetgea gteeaggete egeaggeage
                                                                      360
ageagaacge teceetette gggaagatee geagtgeteg etttggeace gaggaggeeg
                                                                       420
aggatggaac cagtgacctg gacgaggacg aggacctgca aatccaggtg gcctagagct
                                                                      480
tectgtgget gggeaggatg ggeegeeeca tacetgeeea gggteeagge taaceageea
                                                                       540
ctcaaactga tgcagtgcct aggctcactc tgggaccagt ccctgccaca gccgactttc
                                                                       600
ttototocca gggatggcgt caacagtccc acctaccaac gccctgtgga aaggaagcct
                                                                       660
atgttttata tatatatata cacacacgcg cgcgcgcgcg cgcgcgcaca cccagaagtc
                                                                       720
tttggaccca tttggtttta taaatacagg acagetecaa ggeeeagtee agatgacete
                                                                       780
acceacceag gaetteatge agggetggge atgttggggg cagttgttgg agececacce
                                                                       840
tgggctgcct ctctaggctt cgctgttcat catacaatgc agtgaaccca gttatttgta
                                                                       900
ataaatgaag ttcaagttca aaaaaaaaa
                                                                       929
     <210> 5345
     <211> 2863
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1) . . . (2864)
     <223> n = a,t,c or g
     <220>
     <221> misc_feature
     <222> (2)...(693)
     <223> similar to gi3878629 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5345
cacgctggtg aaggagggag gcagagttgt ggccgacctg tcttgcgtgg gagatgagta
                                                                       60
cattgccgcg ctgggcgggg caggagggaa aggcaaccgc ttcttcctgg ccaacaacaa
                                                                      120
ccgtgcccct gtgacctgta cccctggaca gccaggacag cagcgagttc tccacctgga
                                                                      180
gctcaagacg gtggcccacg ccggaatggt gggattcccc aacgccggga agtcctcact
                                                                      240
geteegggee attteaaaeg eeagaeeege egtggettee taeeegttea eeaceetgaa
                                                                      300
gccccacgtc gggatcgtcc actacgaagg ccacctacaa atagcagtgg ccgacatccc
                                                                      360
cggcatcata cgaggcgccc accagaacag gggtctgggg tccgccttcc tcaggcacat.
                                                                      420
cgagcgctgc cgctttctct tgttcgtggt ggatctttct cagcctgagc cgtggactca
                                                                      480
```

540

600

agttgacgat ttaaaatatg aactggagat gtatgaaaag ggcctgtctg cgaggcccca

egeaategte geaaacaaga ttgacetece tgaageecaa gecaatetgt eccageteeg

```
ggatcacttg ggacaggagg tcatcgtgct gtcggcgttg accggcgaga acctggagca
                                                                      660
                                                                      720
getgetgttg cacetgaagg tgetgtatga egeetaegeg gaggeegage tgggeeaggg
cegecageeg eteaggtggt agecaegeea gageggggte geetetggge etetgtetga
                                                                      780
gcaaacctgg gtgtgaattc ggtggttttg aatgcataaa gtgccttgtg gacacggggg
                                                                      840
agttgtggtg cttctgggtc tctgggcccc gcctgcttgg cctgaaatgc cctcatgttg
                                                                      900
ggaagcattc cgtgccccct accccgcctg ccctcccgta tttacttgca cctgtcagcc
                                                                      960
                                                                     1020
ctgcaccgga cttgantgag ccagtttgct catttgtgct gattaacacc cctaataagg
                                                                     1080
ggtttggggg ttgcccataa acggggttgg ccctgccgct gactcgggtc tccgccatgc
acgcgtggac tctcggatga gctcagcaga accgcacagc cagagcccca ggtcagaagt
                                                                     1140
gcagaccagg gttctcagca cagtgcccgt cgtgcttcca tggcttgcta cggagagaga
                                                                     1200
cetetggate caeactgggg etgegtetgg eeegttgtee ageageeetg eggtacegea
                                                                     1260
ageccaggea ecagtgtete ggggggeete actgetgege aaggggtggg geegaggatg
                                                                     1320 -
caagtccagg cagageggeg caggeagetg tgagetttte tecateagee gtetgagaag
                                                                     1380
ageagtgagg ceagetgett cetgteette agaacaette tetgtgetea gtgggageea
                                                                     1440
ggaageetea ggetteaega etgaatgeae eeaatateeg acetggetge gtgtttetgg
                                                                     1500
ctgggctgcc gtgtgcacag caagttaact agaggggctg tgggccatgg aactgtcagc
                                                                     1560
gttattetea gaaggeggee gtggeatggg cagggtatag tgaggagtgg aaggagaegt
                                                                     1620
gtgcctggta atatggggcg gaatttccac tcagctccat ttgctgggga tttaaagaga
                                                                     1680
accettgtge tgegeeagge agttacegag eegaagggag atgatgggee ttegeeeete
                                                                     1740
agtgggatgg cagctgaggg ggccctgcat ttgaccctcg agactgcagc agcgcctttc
                                                                     1800
ctgtctgtgg tttaagtctt tgcagtcaag tactgatgca tccaagccag gcctatgcct
                                                                     1860
ggtgtctccc tgactgcaga ggagccccag ggcaaggaca gctcagctgc tggcagcctg
                                                                     1920
cetggeecat agacateece caagtagtet caggeetetg acatgteect gaggggeece
                                                                     1980
taagaaagaa agtggagggg acactccaga ggctgtcgtg ggaggatcat gtgagcctgg
                                                                     2040
gaggtcaagg ctgcagtgag ccgtgattgc accactgcac tccagcctga gtgacagagc
                                                                     2100
gagaccetgt etcaaaaaac aaacaaacaa acaaacaaaa acagaacatt etgggeacgg
                                                                     2160
tggctcatgc ctgtagtccc agcactttgg gaggccgagg ctggtggatc acaaggtcag
                                                                     2220
gagattgaga ccatcctggc taacacagtg aaaccccgtc tctactaaaa atacaaaaaa
                                                                     2280
attagocagg cgtggtggcg gtcacctgta gtcccagcta ctcgggaggc tgaagcagga
                                                                     2340
gaatggegtg aacetgggag geggagettg cagtgageeg agateacace actgeactee
                                                                     2400
ageetgageg acagageaag actecatete aaaaaaaaaa aataataata ataatageta
                                                                     2460
aatactggaa acaaccaata ttccatcaac aggagaatga ataaacaaat tgtggtatag
                                                                     2520
ctatacaatc caatactatg cagcaataaa aattgaatca atcactgata cacataacat
                                                                     2580
gcaaggatga agctcaaaaa cattacactg aacaaaagag gccagacaca acagtatgtc
                                                                     2640
tgagtccatt tacatgaaat tctaggaaag gtagaatatc ctacagtgta gagaacacaa
                                                                     2700
taataagaaa acaaacaacc tgatttaaaa ataggcaaac caagagtagt agtgtgtgcc
                                                                     2760
tgtagtccca actacttggg aggctgaggc gggaggatcc cctaagccca ggagctcaag
                                                                     2820
acctgcctgg gcaacatagc aagactctgt ctcaaaaaaa aaa
                                                                     2863
```

```
<210> 5346
<211> 618
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(616)
<223> similar to gi5923801 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5346
gaattettga aggaaaagga gaaattagaa atggagttag cagcagtgcg gactgcaagt
                                                                60
120
gtcatcaagc tggaagagga gttacgagag aagcaagcat atgttgagaa agttgagaag
                                                                180
ctgcagcagg ccctgaccca gctgcagtct gcatgtgaga agcgagaaca gatggagcgg
                                                                240
agactgcgga cttggctgga gagagagctg gatgcactga gaacccagca gaaacatgga
                                                                300
aatggccagc cagccaacat gccggaatac aatgccccag ccctcctgga acttgtgcgg
                                                                360
gagaaggagg agcggatcct ggccctggag gccgacatga caaagtggga gcagaagtac
                                                                420
ctggaggaga gcaccatccg acactttgcc atgaatgccg cagccactgc agcagctgag
                                                                480
                                                                540
agggacacca cgatcatcaa ccactcacgg aatggcagct acggagagag ctcgctggag
                                                                600
gcccacatct ggcaagagga ggaggaggtg gtgcaggcca acagaaggtg tcaggacatg
gaatacacta ttaaaaat
                                                                618
```

```
<210> 5347
<211> 1356
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1336)...(283)
<223> similar to gi5689493 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5347
ttttttttt ttttctcttt aaattatttt attcaagaag tgggggggga cagacaaggg
                                                                       60
gactgagetg ageectgagt ceetgaaeet eecageteag eecceaeage aggactggae
                                                                      120
tcaaagtcag agggtggaga ctccagcccc acccagacac ggttggggac agacaggacc
                                                                      180
cagggaatac cgactgactg tectecaggg ggatggegge egeageaeae agggeeegge
                                                                      240
ccgtggaccg cccgggtggg gctatttggg ggtgccgccg cccttcttgg gagtggtggg
                                                                      300
tttcttgccc tgccagaggt gtccctggat ggtgaaggca tcgacgctca tggacatggt
                                                                      360
cttggcgggg atctgggtga agcgcttgcg gtccgagttg tacttgtaga tgccttccac
                                                                      420
catggcgggc gtgacggtcc ggggcccata ccctgccagc cgcgacagct cctctgtctc
                                                                      480
eccegacage gigitagageg ecceggaacig geagetegag tegegaaaga ggaicaggaa
                                                                      540
gtggttggcc ttgcttttct caatttcctc cagaatgcga ttcttctgcg gttcgttcac
                                                                      600
ettgeeegee aggeageagt gtgataggge attgtggatg atgaacttgt tggaettgge
                                                                      660
getgggttet ttgtacagee gtggaeetgt gtaeteggge aetgaegetg gggaggagge
                                                                      720
attgctgcca ttttcccagt cccgttcgcg gcttccaggc aggcggcttg gggacatgag
                                                                      780
acctgacggg gagggagccc gagacgtggg cctcttcacc ccgaggttat tgtgggcctc
                                                                      840
gttggccaca gtggacagtg acagggtgga ctgggaatag attttgctca gccgagagcc
                                                                      900
cagcaggceg egggetggge ttegtgecag ggetgagteg teacagcaac eegagegagg
                                                                      960
ccgggtggcc ctccgcccgc cccgacctgg acccccggac cccgcagccc ggggccgcag
                                                                     1020
caccttateg aggtegteca teagetteag etgggeeegg egetegtaet eetgeegegt
                                                                     1080
gaagteeeee tteeggggge eegeeteete eteggetgga geeegggeag eaggggetgg
                                                                     1140
agtegecate gggaetgegg acacaagegg ggetgggeee ggggeeteet ettgggeeag
                                                                     1200
cetegeggee tectecetee getgtteett etecacetee agacaeggee tgegeegeeg
                                                                     1260
cgcctcctgt gctggccgat aaacccgctc aaacaggctg gaccgctttt gggccatctc
                                                                     1320
gtccgcaggc ttgcgaaatc tccgcgatga tcagaa
                                                                     1356
```

```
<210> 5348
<211> 2038
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1836)...(833)
<223> similar to gil663698 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5348
gaagtagatg tgacccacct ggatgtatgg gttttgtatt gggcgccagc aggctccagc
                                                                       60
cccacctgga gggactgcca ccaggggcac cagcagaggg aagccgtccc aggactgccg
                                                                      120
gatggaccet getecaaact cageetgete teettgtgae ageagageet ttgcaattee
                                                                      180
tgagggtcat catggggcag gagacagaca gtcctgtagg atctgtggtt gtctcctttt
                                                                      240
gacaatetea etgitetteg tgeetgeeet ecaaatteag tageatgiet caaageetta
                                                                      300
catctctcgg cacccagagt tcagtgcatt tccaacctgt gcacctggcc tgtgcaacca
                                                                      360
eccageetet tetgggggae teactetece tggetgagge tetgtetett ttgtgtetee
                                                                      420
aaagctgctg tetecegaee tggggeagga ggggetgagg atacetetet tgggtaatag
                                                                      480
tecetetegg etgaageage teetgetggg eeaggegate acagggeatg etgggeagag
                                                                      540
gggetetgge eggetteate treecacetg etecteeggg tgteteeete tetegeagee
                                                                      600
gggatetgea tggcgtetea tetegattge tgtgtgaaaa teaggtgaaa tgaggeetgg
                                                                      .660
tggggctgtg gattggcacc tggatcttcc attgtcagcc agctgcagtt ttgctcagtt
                                                                      720
tacgtgggtc aaaaaaacaa aaaacaagga tgggtcaaca tcctgtttct ttttcacttt
                                                                      780
ttaagettta accaetegag ttgtggatet tggggeetet ettgattagg ggttaecaaa
                                                                      840
caattcatca ageteetgea tecaetegte ceetggeeeg cetttgatga tggagteeae
                                                                      900
aaggtetgea eegteeggga ggeeagggaa ggaaceeeca geteegtege eactgtaatt
                                                                      960
gtatgacacg teetgagggg catteegete ataggettgg etetggetge ttggageaaa
                                                                     1020
getgecactg ggtatetget getgtgetgg gggetggetg aacgetggea tgeetgggae
                                                                     1080
tecetggete aggecagaea tgaccattgg eetegeetgg etggtgeett getgeeegg
                                                                     1140
gagegatgge atcatetgee gacecatgge agetgggttg agggteetea etgtgeeegt
                                                                     1200
gttagcatcc acgactgact ggctcagtcc ctgtgggaag tgctgcttgg tcagtctcgg
                                                                     1260
ctgcccagct tgaagagggt agctggcgcc attgttgaat ggtcccaatt ctccactagt
                                                                     1320
ceteccagge atgecetgea agetectetg ttgecagett tgtgeteett getggaetgt
                                                                     1380
teccataagg etetgeagee ttggagggge ttggggeeta ggeaaggeet ggeetactgg
                                                                     1440
ccctttcatc tgtggatgtt gctgggtaat ggctgagttc accagcatgc tctgaccaaa
                                                                     15,00
gccactcacc attccaaccc cctgcccaga ggcaggttgc ctcggtccct gggcttggtt
                                                                     1560
atgtgtgatg ctcatgccac tttggtttgg atgctgcaac atttgggtca tgcctgtgct
                                                                     1620
catattgtac attectggtt ggctggtagg cgtggtgcta taaggggcca gtcccatctc
                                                                     1680
egactgegea getgeggtgg ceategteec agggttetgg gagggteeta tteccateat
                                                                     1740
gcctgcgttc tgtgccatca gccgtgacgt tcgcatgctc tggagggctg cttggcttct
                                                                     1800
tacggctgct atatcctggg gagaacctgc agtgaaaaag-aggacacata ccactcactc
                                                                     1860
ttctccataa gcaatatact gcaacaagat gttggaattt tctttgggaa tgacaaaatt
                                                                     1920
cctttatatg aaaggatcta ctctgataat aaatctgtaa caaaaatgat tatttttctg
                                                                     1980
attatagcat atgctgattg cgaaaatttt gaaagtgtta aaaaatacag agacaaaa
                                                                     2038
```

```
<210> 5349
<211> 1009
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (188)...(366)
<223> similar to gi338330 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5349 ttttttttt ttaatageta attttttgta atgaaattac atgcagatga ttttttaaca 60 ataaaacatg ttactatgta tcagaacaaa catgggtgta aattttttta aatggtgaaa 120 getataggaa tigaetetag agatacecat atcaggatgt gggtgacetg cetgtetgea 180 tetttgeagg teetggaaca acctgtactg tgtgeteagg aacagtgage taacetteta 240 caaggatgec aagaacetgg ceetggggat geeetaceat ggggaggaac ceetggeeet 300 gagacatgcc atctgtgaga ttgctgccaa ctacaagaag aagaagcacg tctttaagct 360 gaggtgagge etteetggee titgaaaget egggttgatg gettgatttg geattagtgg 420 cagggcagag gccctctgta ggggaccagt gccaggcctg agctgctcct caggggtttt 480 tcaaatcaaa gaggctgatg gtccagactt tgacctctca gaaagtgctg ggctgcctga 540 gaggggtetg gatgttegge teagggtatt gtgggateag ageeageest etgeeeageg 600 ccccctccag aggtgtctcc atgacaggaa accctttgtc ctcctaggct gagtaatggc 660 agegagtgge tettecatgg caaggatgag gtaagegegg geageetage eeagaeetgg 720 ctaagaaggg ggtaggtgga ggaccccagg ccgcttgccc tggaggcccc ctcagaaggg 780 gcagtcccaa gagcccccac cattgttgcc tggcccggga ggtggggggc tgtgggcctc 840 cagacterac egtgaceete egeceegeag gaggagatge tgtcetgget geagggegtg 900 agcacegeca teaacgagte ceagageate egegteaagg egeagageet geecetgeet 960 teceteteeg geeeegaege eageetegaa ttecaceaeg etggaetag 1009

```
<210> 5350
<211> 1077
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(924)
<223> similar to gi5059425 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
    <400> 5350
    ggaatteget tgetggaaga gaagttgagt tgecaacega accateacte gtgtaegaag 60
    cagtgtgeaa caggeagaac eggeetteat tggetgaget geeceaagee gggeetgaga 120
    cteceggett agaaggaetg aaggagetaa tgeagetetg etggageagt gageecaagg 180
    acagaecete etteeaggaa tgeetaecaa aaactgatga agtetteeag atggtggaga 240
    acaatatgaa tgetgetgte teeaeggtaa aggattteet gteteagete aagageagea 300
```

```
ataggagatt ttetateeca gagteaggee aaggagggae agaaatggat ggetttagga
                                                                      360
gaaccataga aaaccagcac tctcgtaatg atgtcatggt ttctgagtgg ctaaacaaac
                                                                      420
tgaatctaga ggagcctccc agctctgttc ctaaaaaatg cccgagcctt accaagagga
                                                                      480
gcagggcaca agaggagcag gttccacaag cctggacagc aggcacatct tcagattcga
                                                                      540
tggcccaacc tccccagact ccagagacct caactttcag aaaccagatg cccagcccta
                                                                      600
cctcaactgg aacaccaagt cctggacccc gagggaatca gggggctgag agacaaggca
                                                                      660
tgaactggtc ctgcaggacc ccggagccaa atccagtaac agggcgaccg ctcgttaaca
                                                                      720
tatacaactg ctctggggtg caagttggag acaacaacta cttgactatg caacagacaa
                                                                      780
etgeettgee cacatgggge ttggeacett egggeaaggg gaggggettg cageaceee
                                                                      840
caccagtagg ttcgcaagaa ggccctaaag atcctgaagc ctggagcagg ccacagggtt
                                                                      900
ggtataatca tagcgggaaa taaagcacct tccaagcttg cctccaagag ttacgagtta
                                                                      960
aggaagagtg ccacccettg aggeceetga etteetteta tggeagtetg geetgeeeae
                                                                     1020
aaactgactt tgtgacctgt cccccaggag tcaataaaca tgatggaatg ctaaaaa
                                                                     1077
```

```
<210> 5351
<211> 2093
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . . (678)

<223> similar to gi6002585 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5351
atggctgcgg ccggcggcgg cggcggcggg cgggccgagc ctactcgttc
                                                                      60
aaggtggtgc tgctggggga aggctgcgtg gggaagacgt cgctggtgct gcgctactgc
                                                                     120
gagaacaagt ttaacgacaa gcacatcacc actctgcagg catcattctt aacaaagaag
                                                                     180
ttaaatattg gtgggaaaag agtaaacctt gccatatggg atacggcagg tcaagagaga
                                                                     240
ttccatgcat tgggtccaat ttactacaga gattcaaatg gagcgatttt agtttatgac
                                                                     300
ataacagatg aagattettt teagaaggta aaaaaetggg teaaagaatt aeggaaaatg
                                                                     360
ttgggaaatg aaatctgttt atgtatagtt ggtaataaaa tagacttgga aaaggagaga
                                                                     420
catgtttcca ttcaagaagc agagtcgtat gcagaatctg tgggagcaaa acattatcat
                                                                     480
acttcagcca aacagaacaa aggaattgag gaactctttc ttgacctttg taaaaggatg
                                                                     540
atagaaacag cacaagtgga tgagagagca aaaggcaatg gctctagtca gccgggaact
                                                                     600
gcaaggcgag gtgtacagat tattgatgat gaacctcaag cccagaccag tggtggaggg
                                                                     660
tgctgttctt ctggataact gttcacgcct aagaaattaa aagacagaac aaaactgtgg
                                                                     720
atcattgece teaacatgaa gaetgeeata ttecaagtea cattatttta eeaatggaat
                                                                     780
tatagaatta acagtatttt aaattacgtt tataacactg cagagacctt aagtgctaaa
                                                                     840
cttagtggag tttgtgacca gagaattggc attttctaca aatgtttttt tttggttttt
                                                                     900
ttttggtttt ttttgggttt ttttgagacg gagteteget etategeeca ggetggaatg
                                                                     960
cactggettg atetetgete actgeaaget cegeeteeeg ggtteaegee atteteetge
                                                                    1020
ctcagcctcc cgagtagttg ggactacagg cgcccgccac cacacccagc taatgttttt
                                                                    1080
gtatttttag tagagacggg gtttcaccag gttagccagg atggtctcga tctcctgacc
                                                                    1140
ttgtgateeg eeegeetegg eeteecaaag tgetgggatt acaggegtga gecacegtge
                                                                    1200
ccggcctaca aatgttaaca aagcaattac caatggcctt tttacatatt ttttctttaa
                                                                    1260
tgaggaataa tatgcatgta gaaaagacct acttaaagtc ttcatttata ttctttcaaa
                                                                    1320
tcaaatcttt atttaataac ttatatatgt tgttggaatg gttacatttt tgcagccctt
                                                                    1380
tgtattttgt ggtagtttaa attgtatcac ttctaaacag caaactgttt ttgtttttaa
                                                                    1440
```

```
ttaqcaqata tctqaagtac tatttttgca gggtttgcac aqqcccqtaa ctqtctacta
                                                                     1500
ctttgatata atctgtatac atcctgtatg ctgagctggt aaaatacatt gtaaattaca
                                                                     1560
tattaaatat tttatctgct tttacaagcg caaggtgcaa aaatatatac aatagtctca
                                                                     1620
ttgatgactg taaagtgaat taacatttgg tgattatgcc tagctttttt gactaatata
                                                                     1680
aagatcatag ctccccttca cttctgtctt aacttgaaca tggcqtqttt aaattttcat
                                                                     1740
acatacttta cttgaattat tgctgttgtc acatattttt gcctctgtga gttcatctga
                                                                     1800
tgattgagca gtagcatttg ccttttgggt tttttgtttg ttattataga agagatgact
                                                                     1860
totgotgatt ttgotttaga atggttacct tagaagaatt tgggtggctc atgttgaatt
                                                                     1920
tcacttctgc aatagctttc attttctcat aggctttata agagatgggt tcagtggtat
                                                                     1980
gagcagagga agagatccca gatagtagcc agttaaccaa gactcattca tatagcacgt
                                                                     2040
agtttatgtt cctgaggcag cacttttaga tcctttgtga gcaagttcta ttt
                                                                     2093
```

```
<210> 5352
<211> 1323
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (78)...(663)
<223> similar to gi531241 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters
```

#### <400> 5352 cagtgtggcg gaattcacag ggctaggggt ccagggtgtg ggtgcagcag acagccaccc 60 tggccatatg catctcgttc ccacaggcat tcaccaagga cttcgaggtg agccagctct 120 . atgactgcaa ctggatcgtg gtcaactgct ccacaccggc caactacttc cacgtgctgc 180 geoggoagat cotgotgood ttoogoaago ogotgattat ottoacacot aaatototgo 240 tgaggcaccc agaggccaag tccagctttg accaaatggt atccgggacc agcttccagc 300 gggtgattcc tgaagatggg gccgcagcac gggcccctga gcaggtgcag cggctcatct 360 tetgeaeggg aaaggtgtae tatgaeetgg tgaaggageg gageageeag gaeetggagg 420 agaaagtggc catcacgcgc ctggagcaga tctctccatt ccccttcgac ctgatcaagc 480 aggaggcaga gaagtaccca ggtgcggagc tggcctggtg tcaggaggag cacaagaaca 540 tgggctacta tgactacatc agcccacgct tcatgaccat cctgaggcgc gcacggccca 600 tatggtatgt tggccgggac ccagcggctg caccagccac aggaaacagg aacactcacc 660 tggtgtcact gaagaagttt ctggatactg ccttcaatct ccaggccttt gagggcaaga 720 cattttagag ctgggcaaaa cctgtgtagg tctcgctgtg ggtttgctgg ggaccaaggg 780 ggtgatgaaa aggggagggg cggagctcct gcccaagaga ggggctgtgg ggccccagga 840 taaaacagac acagtgacag ggccaagagc cagcactgct ggccttggtg tcatgccaga 900 atctaccagg actgagggag ccagaggagt cctgtaggca ggctactgtg ctggagcatc 960 ecceagetge teccatettg etggaattte ttgggegget tetecacetg tateteaaga 1020 cagacacceg ggggcctgtg tetgtggccg etcecatece ggcagccetg getgetgete 1080 geoccaecet egettatetg tagatteaaa gegatgttet ettetgtget ettagaagta 1140 gggagttcag cagtaacagc caggtgaagc gaacctgctg ggtgatttgt ttgcgctctg 1200 ttttatgggg cattcctgcg agatgtgtca gcttctgtgt gaaatgcagc cacagctcat 1260 gtgtaccaaa gtagaaaacc aaatcacaga gaaataaaaa catgcttcag agagaaaaaa 1320 aaa 1323

```
<210> 5353
<211> 1158
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(483)
<223> similar to gi2853081 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5353
tttggagagg ccttatggta atgtcggcca ttgagaaatt gttgaggcag gtagattggg
                                                                   60
gtcaactgga ctacttagtt gtagacatgc caccaggaac tggagatgtg cagttatcag
                                                                   120
teteacagaa tatteetata acaggtgetg tgattgtete caegeeceag gacategeat
                                                                   180
tgatggatgc acacaagggt gctgagatgt ttcgcagagt ccacgtgccc gtccttggcc
                                                                   240
ttgtccaaaa catgagtgtt ttccagtgtc caaaatgtaa acacaaaact catatttttg
                                                                   300
gtgctgatgg tgcaaggaaa ctagcacaga cccttggtct tgaagttcta ggagacattc
                                                                   360
cettacacet taatataagg gaagetteag atacaggeea gecaattgtg titteacage
                                                                   420
ctgaaagtga tgaggccaaa gcttacttga ggattgctgt ggaagtggta agaagattgc
                                                                   480
catcaccttc agaatgattc cccaagtgtc ctggaaattt gcctggtact gacattaaga
                                                                   540
ggacctttgg aaatcagcaa tgtggtgatg gaacctacag aaataataga aatcataact
                                                                   600
660
ctttgatgta tcaatgttaa ctgctatatt taggaatttt ttgaaagctg gtgtgtacca
                                                                   720
cctgcaaaga actgcatttt attttattga attacccctt tagaaatcat gagtttatga
                                                                   780
tgttacaagt ccattttggg agagaactgt acactttttg caggaccaca gaattagtaa
                                                                  . 840
tttaaatgat atactaaatt tgtgtatggg cataagtatt acgccttccc accaggcaat
                                                                   900
ttggactgtc tttgaatcct gtctttggta ctgtcttgga catgttctta atatgaacct
                                                                   960
etgettette atetggatea caetataece caaaettaat gaattteagt etecaggagt
                                                                  1020
ggagcctgaa catatgtatt tttagtaaga ccatgatgat gttgatgatg attctggtaa
                                                                  1080
tcatggcagt aagaataata gctaacattt aacaagttaa ttataattgt tcttccattt
                                                                  1140
gtgtgagcgg gtactatt
                                                                  1158
```

```
<210> 5354
<211> 795
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(459)
<223> similar to gi825671 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5354

```
cagggccagt gcatattagt ggacagcact tagtagctgt ggaggaagat gcagagtcag
                                                                       60
aagatgaaga ggaggaggat gtgaaactct taagtatatc tggaaagcgg tctgccctg
                                                                      120
gaggtggtag caaggttcca cagaaaaaag taaaacttgc tgctgatgaa gatgatgacg
                                                                      180
                                                                      240
atgatgatga agaggatgat gatgaagatg atgatgatga tgattttgat gatgaggaag
ctgaagaaaa agcgccagtg aagaaatcta tacgagatac tccagccaaa aatgcacaaa
                                                                      300
agtcaaatca gaatggaaaa gactcaaaac catcatcaac accaagatca aaaggacaag
                                                                      360
aatccttcaa gaaacaggaa aaaactccta aaacaccaaa aggacctagt tctgtagaag
                                                                      420
                                                                      480
acattaaagc aaaaatgcaa gcaagtatag aaaaagcgca ttgaacagtc ctgggcacta
catgtaaatt aagcccaaag atggggagaa aggaaaagga gagacaaata tagtccatac
                                                                      540
tgagtgtcat caacaatcca gactgaagtc ttctatttta atctcaatcc ccttttctga
                                                                      600
tttgccaccc atgcctcttc aggctggaaa caatctcttg gttccctaaa gcactttctt
                                                                      660
etgactgetg tgatteagtg aacettgeee tttgetttet attacttgtg catttgeete
                                                                      720
acctgacaat gttttaaatc gcctttgtat ctccttagct gctcaataaa tatttgaatg
                                                                      780
                                                                      795
catcaattaa aaaag
```

```
<210> 5355
<211> 1119
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1122)...(963)
<223> similar to gi516012 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5355
ttttttttt ttgtgtgaac aagcettcat tgtgcaagcg tgagcccaac aaacaacac
                                                                       60
caggiciges etggeegaag acgaagegte etceetggag gigggaacaa gicacetetg
                                                                      120
accacacete etetgaegee ateaceteet cetggeecea eccaaggget egacacaage
                                                                      180
cccaaggteg gggggagagg ggcggggcgg aaccgagggc ggaggccaag gtgggattcc
                                                                      240
aggaaggeet teegaaggat ggaggtgggt eetgteeete eaggtagett gtgggtgtgg
                                                                      300
acagcaggac ttgctggctc agtgtgggca caaggacact gtgccactgg ttgagtgagt
                                                                      360
ggtgagggat tggaggtggc tcccagaggc ctccatctgc atggccctgg ccctgtggct
                                                                      420
ccagcagget geeetggetg tgggtageee aggageeaca tgegettagt ggggeegete
                                                                      480
tggggcaggg gctctcacag gacagcatga gccactgagc cgcctgggga gggccaggcc
                                                                      540
aggcggggag ctgtggtgca atttgctcct gtccctggag gtctgtgggc ggaagctgtg
                                                                      600
ggcacaggtg gacatggctg teagacgtgg ggtcatagge teccaetece cageteetge
                                                                      660
ctcctcacag acagaagcca cggccaagga gaggagagac atggggaagg cagagatgag
                                                                      720
ggaacaggaa gggagaaggc aatgaggaaa gagaaaggga gggtaagatg cggagggcac
                                                                      780
aggtggatgg ggacgagggg gccaagcatg gacagcggga ggggagaagg cggaggggcc
                                                                      840
gagaggcagc tgcgcaagag ggccttcagg cagagttgag gtctgtggcc ttgggctggg
                                                                      900
ccttgcggga ggtcagctcc gacagcttct tcagccgctt cttcagctcc agcgggaact
                                                                      960
tetegtagea ectettaeae aegggettea tgtegaaete cacaaaettg ttetteaggg
                                                                     1020
tgagettget gttgeaggtg gageaggaga ageageteae acaecaggee ttgttgaggg
                                                                     1080
ccgacaccac atcgccttca atcacatggc tgcagttgt
                                                                     1119
```

```
<210> 5356
<211> 1376
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)...(534)
<223> similar to gi1403547 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5356
tttcgtctgc tcggcgtcgt ggccttcagc acgttaatgc tcaaacgctt cagagaacca
                                                                       60
aagcatgaaa gacgtccgtg gaggatatgg tttttagaca cttccaaaca agccatagga
                                                                      120
atgctgttca tccactttgc aaatgtatac ctagcagatc tcactgaaga ggacccttgt
                                                                      180
teactgtace teateaactt ceteetggae gecaetgtgg geatgetget catetacgtg
                                                                      240
ggggtgegeg cegteagegt cetggtagag tggcageagt gggagteeet gegettegge
                                                                      300
gaatatggag accetetgea gtgtggagee tgggteggge agtgegetet ttacategtg
                                                                      360
atcatgattt ttgaaaagtc tgtcgtcttc atcgtcctcc taatacttca gtggaaaaag
                                                                      420
gtggccctgt tgaatcccat tgaaaaccca gacttgaagc tggccatcgt catgctgatc
                                                                      480
gteceettet ttgtcaacge tttgatgttt tgggtagtgg acaattteet catgagaaag
                                                                      540
gggaagacga aagctaagct agaagaaagg ggagccaacc aggactcgag gaatgggagc
                                                                      600
aaggtccgct accggagggc cgcatcccac gaggagtctg agtctgagat cctgatctca
                                                                      660
geggatgatg agatggagga gtccgaegtg gaggaggace teegeagaet gaccecete
                                                                      720
aageetgtga agaaaaagaa geacegettt gggetaceeg tatgacacat teccatgetg
                                                                      780
ggggtgacgg gagggccccg ccaaccgctg gtgtgcagag gtcatcccgc agcatcgttc
                                                                      840
ettaccetet etetgecett cetttetace tetgeteete ttgetgtete tgecegetet
                                                                      900
cgcctgcccc cagactactg tgacttaaaa agagggaaga ggagccagcg cccgaggggg
                                                                      960
ccactggcgg ctggaggtcc ccattcagtt gcactacaaa cactgaccaa atatgcaagg
                                                                     1020
aaggagetgt gtttgtttgt tgtegteeca gaeagtgttg tgagggaeet gaggeeetge
                                                                     1080
cccgtgtccg accaccgagt ggcaaggtgg aaggaagcac aggcacacag accgtgggtg
                                                                     1140
ggteteetea cegtggetgt gggeagtgeg aacacataac accetegge taaaagtgac
                                                                     1200
tegttgaeea agttggaaee ggaatgettt ettaeteaaa atggettttg taaetattga
                                                                     1260
tttctgaagc tggttttatg agttgtgaca gtgttaccag gttgggggta tgtgtttatt
                                                                     1320
tectacaaag taettaeggg actaatggge aaaacagaga tttttaagte tteegt
                                                                     1376
```

```
<210> 5357
<211> 957
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (959)...(383)
<223> similar to gill36412 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5357
ctgccagtga agcccaggct gctttttcag actgtgtgta gcaccaagaa cgcttccttc
                                                                       60
                                                                      120
acacgatett caggategag egggetgaet gggagtgtet geeteagtee caegtggeae
                                                                      180
ttggaaaaaa cagagegagg ccccccaag aggcagegec cacceggeeg ccgtgeteec
ccaacttggg gacgtctggc cttggacagc tgggcccgtc tctcaccacc cacctcagag
                                                                      240
gcaaaaaagg attcacaccc agatctctag aaaaatgatc aaaagcaggt ttcttctcac
                                                                      300
agecaagett cetggacatg geagtteatt acateteggg aaaaegtaaa teatttette
                                                                      360
agetgteaat aetgtgteee teacateett gageetegtt ettgeaaaat ettggeette
                                                                      420
tegetggget egetggeegt acegtaeggg gtgttgtgea geteettgga caccacaeg
                                                                      480
aggaactegg cttggtette gtteccatag ttgtaagagg ageegatget gaeeaactge
                                                                      540
tegaaettee ageegtegga catggtggae accatetgeg tgageteete eteetggeae
                                                                      600
tgcagcacac ggtacacatg cttcacaggc acctgcgatg ttttgctgtc tcgttctcta
                                                                      660
attitigteet tiacaagitt tattaatgag gigatatigt aaaattetge ticeteeaac
                                                                      720
actecttect eegegaggte tttgttaate accagettge egtgteteag gtagtteage
                                                                      780
acaggeccaa agtaggtggg gtetetgteg attaaatagg egeetgttte atcettgtet
                                                                      840
gagtccaggt cgggatcggc ctggcataag cggtacagga aggatttcgg gtcccggcac
                                                                      900
agggtetgee gagtggtgäg gaagtaggtg eegeegaegt tgagteggae eeaettg
                                                                      957
```

```
<210> 5358
<211> 520
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(521)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2)...(96)
<223> similar to gi5912261 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5358 ctcagagtgt aagggcaaac aatatgtcaa aaggacatgg tataaaaaat ttgtaggagt 60 gcagctgtgc aactctctca gatacaagat tttctgtgag ggagtcgctg gctatgagtc 120 attaaatatg catgataata tttttgaaac qatgagttat caaqacactc attaaattgt 180 ataactaatt ttttagtata tatcctttgc agttaaccag tgattattat atatcaatat 240 tgccctactt ttgtggaaga ttttaggatc cttttgtgtg ttggtcatta tctctattaa 300 aagggaaagt ccaaaaatct aggtttttgg aatctttatt tttaqaaqqt aacttttaaa 360 tttttatttg aaatgtacaa gtggctcttt gccacatata acttaccttt tcaaattaaa 420 aatacgtatt ttatttttat ttcctggacc caacaaacag atgacangta tgggagtgtg 480 aaggtgaaga gtaaccacta taaactgact tgaagaggcg 520

```
<210> 5359
<211> 1541
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1039)...(530)
<223> similar to gi1204166 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5359
ttttttttt ttcacggtgc cttcaagctt tattgccaca cacactcccc cagcccttcc
                                                                       60
tgaatggccc tgtgcatggg aacaccagct tagagaagca attcagggct aggcaagggc
                                                                      120
cagaggactg gatttgggac tggggtgggt aggggggatc tggagaagga aagtgctaag
                                                                      180
accaaagccc accccaccc caggitticcc tgagiggigt ccacccccag ggictigggg
                                                                      240
getggettgt geattggggg gagggggete ateceaaatg gateeteece tggggtetee
                                                                      300
aggeteatgg agggaagaga ageeceattg ageecetege acceecatg aageeeteaa
                                                                      360
tgtgcaggga gcaggaagaa gagctgcaca caaacgcata cacatgcttg tctccaagag
                                                                      420
ageteetgge eeetgggget geeeageeag gggeteaaca gteeagaeeg atggacaega
                                                                      480
geaggteete gagtgeeege agaegetget gegeeteete tatggegetg taggtetgea
                                                                      540
cegtgetgge caegtggaag eggatgtegt ceaceagegg gatagagtee gteteetgee
                                                                      600
gggetgecae ageegetgee teeteettea eegeeteeae gaagteetee egeteeaeea
                                                                      660
getteteaat gacettggee atgtaeteag tgeaetggte eteaageege geeaggegga
                                                                      720
agagettgge caegegeeae acaeeeaeea cagtgteete gtetageate tgageeagge
                                                                      780
tgcggccgca cagcctcttc aggcctggca gcaggtacat gtcggcgacg ctcagcacat
                                                                      840
cataggetge etegggggae ageteagtgt ggtegetgta catqtaqtaq aqeaegtgaq
                                                                      900
tgaagacgtc gggtgagatg ccatgcaggg tgacggctgg ggggccccct gaggtcgctg
                                                                      960
geteeteget eteteggaag tggteateea geagggeteg gaagtagtea etgeggeeae
                                                                     1020
agaaaaagge ettgtggeag aggaagetge agecagecae teggaageag atgteaggge
                                                                     1080
agctgttgaa gccgtcagga caagggaagg gcagctccca aagatcacct cggagctcgg
                                                                     1140
ggggcagggc acaatcggcc agcagcgcca tgtcctcccg gaggcggggg tctgcaggtg
                                                                     1200
ggggctcgat ggtcagcacc ttcacacacg tgcctggctt agacgccaca aactcagaca ~
                                                                     1260
ccttctcgca cttggcctcc aggtcgctga gcaggtccca cagctggcat tgcttggcca
                                                                     1320
ggcgctcaca gtcactcaca tgctctacgc caatgtccag gcggcctggg ggcagtgggg
                                                                     1380
aggatgaggg cctgcgggac ctcagctgtc atcaggccca cagaaaaagg gtgatcccct
                                                                     1440
cccacctggc cacctggctg caggactagg actcctgggc ccacttgcca ccatggtttc
                                                                     1500
cccatcaaaa gctgttcgga cgcgtgggtc gacccggaag t 🧸 🦠
                                                                     1541
```

```
<210> 5360
<211> 904
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (900)...(770)
<223> similar to gi2707600 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5360
teeggaatte eegggtegag eetgeateeg agtageggtt etegaageag etggggeatt
                                                                       60
aggggettee eccaggeagg geatategte eccegeccag aggeeeggeg eagteetgge
                                                                      120
aacagaagtg gttctcatgc cagcgctgtc cctccgcctc ggtgcagcgc caggagaaga
                                                                      180
tcagctggga gagggagagg gagaggggaa cgcttcattc attcattccc tcattcattc
                                                                      240
atccagtaac cacgcetttt acccagttaa cgctaaagca cgtctgcaca cattcccatt
                                                                      300
taattcactc agccactttt ggacgcaggg aggactgatt ggcttaacca ggatcccagc
                                                                      360
tagcaagtgg gacaatcccc agtgcgacct gggggtctgg actcccaacc cagggctcca
                                                                      420
ggcttccttt tatgctgaca tcaagggaat ttctagcatg atgaggcaca gcactgggca
                                                                      480
                                                                      540
cteggeatet actgagatga geatgtgtee aagaeteeet getetataga aattegatga
gtccaggaac atttgaggga ctctgcagtg ggggaggcca gagagaaggg cactgggtcc
                                                                      600
tacatgccca gagctcaagt cagaacacag ggaacttggt agtcccaggc tggttcctac
                                                                      660
                                                                      720
ttctccccac tccctgatac tgggagaaac tgtggcccag gagagtgtcc ctttgtatcc
tgccactetg gactetggge agaceeecag tteeteeeet ecaggetgta eetggteaca
                                                                      780
agccgggcag cgcgggcgca gcaactctgc atgatgacgg ccgcagtaga gttgtccatc
                                                                      840
atggtagaag tagatgaggt ttatcagggc ctggccacag gcctggcagg caaagcaagg
                                                                      900
                                                                      904
```

```
<210> 5361
<211> 988
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (20)...(279)
<223> similar to gi3688089 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5361
cgcctcacct tccctaccac cagccggggc cattgacacc cgggacacag ggtcctctga
                                                                       60
gcetcageca ecaceggage egecteggte agggecacea etgeccaaeg geetgaagee
                                                                      120
egagttegee etggeactge eccetgagee geceegggg eetgaggtea aggggggeag
                                                                      180
ctgcggcctg gagcacgaac tgagctgctc caagaacgag aaggagctcg aggagctgct
                                                                      240
tetggaagee agteaggaat eegggeagga gacaetgtga eactttagtt eeettttee
                                                                      300
ggtcggtctg cgatgagctg aggccagagc catgagaatc tgctcacctt cccccagcc
                                                                      360
tteetgagge ceaggatgee aggggtgggg gecattetgg ggeeeceete ceeceacage
                                                                      420
aacactacaa ggggtgcagg agctacaggg agtggccctc cgcgcgtgac tcaagcactt
                                                                      480
ctatttatga gcccagcact ggaagactct gggggtgaat gggaggaggg ggagcaggag
                                                                      540
gaggaggagg tetecaagga cateaggege etgttetgga ggggeeagge ttgeeetgeg
                                                                      600
gagggcaggc gtcctgggtg gtggtgggat ggtcccctgt ggccccgggc acagggccgg
                                                                      660
gcaggcagcc tggtgccgga gaggcggtgc gtgctggtgg tggttgagat gcgcagaaca
                                                                      720
gccccagaca gcgcaggccg ggcagggtgg ggggatggga gcagaggatc agagctttct
                                                                      780
ttttctcaag tgcaataaat ctatcaggga gctggggcgg gagcagccgg cactccggga
                                                                      840
ccctgctgtc caggccactg gaggctgcgc cctgagaggc actacagccc tttgggggcg
                                                                      900
agtggcatgg gtgtgggtga gggtgggcag agggctgggg ctactcctgt cggtgcaact
                                                                      960
ctgttcacac cttttctaat aaactggg
                                                                      988
```

```
<210> 5362
<211> 1496
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1272)
<223> similar to gi5453423 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5362
atgtgtgtgg gaaagccttc agtcagagct cagatcttat tctgcatcag agaatccata
                                                                       60
ctggggagaa accatatcca tgtaatcagt gtagcaaaag tttcagtcag aattcagacc
                                                                      120
ttattaaaca tcgaaggatc cacactggag agaaacccta taaatgtaat gagtgtggga
                                                                      180
aagettttaa teagagetea gteettattt tacateagag gatteataet ggagagaaae
                                                                      240
cctatccctg tgatcaatgt agcaaaacct tcagtaggct ttcagatctt attaatcatc
                                                                      300
aacgaattca cactggagag aagcettace catgtaatca gtgcaataaa atgtttagte
                                                                      360
gaagatgaga tettgttaaa catcacagaa tteatacagg tgagaaacce tatqaatgtg
                                                                      420
atgaatgtgg gaaaacettt agtcagaget ccaacettat tettcatcag agaatecaca
                                                                      480
ctggagagaa accttatgca tgtagtgatt gtactaaaag ctttagtcgc cgttcagatc
                                                                      540
ttgttaagca tcaaagaata cacactggag agaaaccata tqcatqtaat caqtqtqata
                                                                      600
aaagttttag tcaaagctca gacctcacta aacatcagag agtacactct ggtgaaaagc
                                                                      660
cttatcattg caatagttgt gagaaagcct tcagtcagag ttctgacctt attcttcatc
                                                                      720
agagaattca cactggagaa aaactattat ctgtgcacac agtgcagcaa aagtttcagt
                                                                      780
cagateteag aceteattaa acaceagaga atecacaetg gggaaaaaace atataaatge
                                                                      840
agtgagtgca ggaaggcttt cagtcagtgc tcagctctta ccctacacca gagaatccac
                                                                      900
actgggaaga aaccaaatcc atgtgatgag tgtggcaaaa gctttagtcg gcgttctgat
                                                                      960
ctcattaacc atcaaaaaat acacactggt gaaaagccgt ataagtgtga tgcatgtggg
                                                                     1020
aaagccttca gcacatgtac tgatcttatt gaacaccaga aaacccatgc tgaggagaaa
                                                                     1080
ccctaccagt gtgttcagtg cagcagaagt tgtagccaac tctctgaact tactattcat
                                                                     1140
gaggaagtee attgtggaga agacagteaa aatgtgatga atgtgagaaa acctttagtg
                                                                     1200
tgtacaccaa ctctattcag taccagagac actgtaccag aaaaaaatct aatgaatgct
                                                                     1260
gttgattatt gatgagtatg aaaaaggttt taatcagtgt tcaactctta tgctacatta
                                                                     1320
aaaccacact ggatccggat acgtgtggtg gctcacgcct gtaatcccaa cactttggga
                                                                     1380
ggcagatgtg gaagcatcat ttgagcccag gagtttgagg ctgcagtgag ctatgattcc
                                                                     1440
accattgcac tccagtctgg gcaacagagc aagaccctgt ctatttaaaa aaaaaa
                                                                     1496
```

```
<210> 5363
<211> 1160
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (1159)...(740) <223> similar to gi4150892 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5363
getgegegga egtetttatt ttteeceggg tggggageag gatacaeage eeacaetgea
                                                                       60
gtcacttagc ttgtaaaaat atctcaataa ataaaacaaa caagcaacat atacactgaa
                                                                      120
cagagaatat tttttttaaa atggctagcc aagcaatcac ggagaaagga aaagaatagc
                                                                      180
ggcgtgaaag taagaattcc aggctgactt gaaacaatca tgcagaggct cgggggaggg
                                                                      .240
gaaggaacte gggggteete ttetgagage ettggteeag ttteaacaga attgtacaag
                                                                      300
aatgcatttc tgttttatta aaaaaataga cattaaaaaa ggcacttaga gggaaataca
                                                                      360
aattcaaaat ccaaatcctc ataaatgtgt tcctggaatc tagacatttt cagaaagaat
                                                                      420
aaacctcccc ccaaacataa gacccagaag aaaaatccaa acagaaacaa gatgaccgat
                                                                      480
gacaatgtca ccagcaagag ggctgggagt gcccttccta tgtggggacc gtcctggggg
                                                                      540
aggacgggag cccgggtett etgtecgatg teactgettg tecettetet egacgetggt
                                                                      600
ggagggcaga ggtgggggcc tcctgaggtt gttccaggtt tccagaagtt acagactcga
                                                                      660
atgcatecca attecaettg egeegeegae gegaeggaea geeetggege geeggteegg
                                                                      720
ggtgggtggc gcggcgctag tgggaggcgg acatggacca cgcgccctcc atgcgccaca
                                                                      780
cggagaaggc gtagctgagg cgctcgtggg ccacgtagct gcagctggtc atcttattgt
                                                                      840
ccatctcgtc gctctgcagg acctggtaga ggaagtctat gtacctggcg gccagcttga
                                                                      900
gegtetggat ettgeteage ttgteagagg geagegtggg gatgatettg egeagegeeg
                                                                      960
cgaaggeete gttgagegae tgggtgeget ggegetegeg caegttggee aggatgeget
                                                                     1020
ggctctgcag ctcctcgaag gactgcgcgc tggggctgcc cttcttgccg cgcttgcccg
                                                                     1080
gggtcgggct gccatcttcg ctcgacttct tgctgtagcg ccgcttccgg ccgaagcgct
                                                                     1140
tgggctgcct ctcgacccgg
                                                                     1160
```

```
<210> 5364
<211> 6277
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6278)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (290)...(5310)
<223> similar to gi1200235 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5364

gggtcgaccc acgcgtccgc ccacgcgtcc gtgttctttc tgagagggga ctttcggctc 60
ctcagtgtct gggatgcaaa caggttgcgg agggtggat gacagcctga acccaggttg 120
cgggggtccc ctgtgtgcag ggaggctggt caccctgccc tctgcagcct ttctggcctg 180
ggcctctgtg atcatccagg cgggaggggg atgcagaggg aagctggcgg tggcccgtga 240
```

```
tgttggcaca gggcctcacc ggatgctgtc tcctccccct gctccccagg tgtaccagga
                                                                      300
tgagtttgtg tcctcccaga tcaagatccc ctcagacacg ctgtccttgt accctgcctt
                                                                      360
tgacatetae tacatetaeg gettegteag egeeteette gtgtaettee tgaegetgea
                                                                      420
gctggacacc cagcagacgc tgttggacac agcgggcgag aaatttttca cgtccaagat
                                                                      480
cgtgcgcatg tgcgcgggag actcagagtt ctactcatac gtggaattcc ccatcggctg
                                                                      540
ctectggege ggegtggagt accgettggt geagagegee caeetggeea ageetggeet
                                                                      600
getgetggce caggecetgg gegtgeegge tgatgaggae gteetettea ceatettete
                                                                      660
teagggceag aagaaceggg ceageceace eeggeagace atectetgee tetteaceet
                                                                      720
                                                                      780
cagcaacatc aatgcccaca teeggegeeg catecagtee tgetategtg gggagggcae
                                                                      840
tetggetetg ceetggetge tgaacaagga getgeeetge atcaacacce ceatneagat
                                                                      900
caacggcaac ttctgtgggc tggtgttgaa ccagcctctg ggaggcctgc atgtgatcga
                                                                      960
ggggetgece etgetggeeg acageacega eggeatggee agegtggeeg cetacaceta
ccgccagcac tctgtggtct tcattggcac gcgcagcggc agcttgaaga aggtgcgggt
                                                                     1020
cgatggette caggatgece acctgtatga gacagtecee gtggtggatg geageceat
                                                                     1080
cctccgagac ctgctcttca gcccggacca ccggcacatc tatctcctga gtgagaagca
                                                                     1140
ggtgagccag ctcccggtgg agacctgtga gcagtaccag agctgcgcag cctgcctggg
                                                                     1200
                                                                     1260
ctccggggac ccgcactgtg gttggtgtgt gctgcgacac aggtgctgcc gcgaaggggc
ctgtctgggc gcctctgccc cacacggctt tgctgaggag ctgagcaagt gtgtccaggt
                                                                     1320
gegggteegg cecaacaatg tgteagtgac gteacetggg gtgeagetga cegteaceet
                                                                     1380
gcacaacgtg ccagacctca gtgcgggcgt gagctgcgcc ttcgaggcgg cggcggagaa
                                                                     1440
cgaggcggtc ctgctgccct ccggtgaact gctctgcccc tcaccctccc tccaggagct
                                                                     1500
                                                                     1560
ccgagetett accaggggge atggggecae ccgcaetgtg eggetgeage ttetetecaa
ggagacagge gtgaggtttg ceggtgetga etttgtette tacaactgea gegteeteea
                                                                     1620
gtcgtgcatg tcctgtgttg gcagccctta cccctgccac tggtgtaagt accgccacac
                                                                     1680
gtgtaccagc cgcccccacg agtgctcctt ccaggagggc agggtccaca gccctgaggg
                                                                     1740
etgecetgag atcetgecca gtggggacet cetgatecce gttggggtea tgeageetet
                                                                     1800
taccttgcgg gctaagaacc tacctcagcc gcagtcgggc cagaagaact atgagtgcgt
                                                                     1860
ggtgcgggtg caggggcggc agcagcgggt gcctgccgtg cgcttcaaca gcagcagtgt
                                                                     1920
gcagtgccag aacgcctcgt actcctatga aggtgatgag catggtgaca ccgagctgga
                                                                     1980
cttctccgtg gtctgggatg gagacttccc catagacaag cctcccagct tccgagccct
                                                                     2040
cctgtacaag tgctgggcgc agcggcccag ctgtggcctc tgcctcaagg ctgatcccg
                                                                     2100
cttcaactgt ggctggtgca tctcagagca caggtgccag ctgcggaccc actgcccggc
                                                                     2160
cccgaagacc aactggatgc acctgagcca gaagggcacc cggtgcagcc acccccgcat
                                                                     2220
cacgcagate cacceteteg tggggcccaa ggaaggagge accegggtca ccategtggg
                                                                     2280
tgacaacctg ggcctcttgt cccgagaggt gggcctgcgg gtggctggcg tgcgttgcaa
                                                                     2340
etceatteeg geegagtaca teagtgetga gaggategtg tgtgagatgg aggagteget
                                                                     2400
ggtgcccagc ccgccgccgg ggcccgtgga gctgtgtgtg ggtgactgtt cagccgactt
                                                                     2460
ccgcacgcag tcggagcagg tctacagctt tgtgacccca acgtttgacc aagtgagtcc
                                                                     2520
cagccgtggc ccggcgtccg ggggcacacg gcttaccatc tcaggcagct ctctggatgc
                                                                     2580
tggcagcagg gtcacagtga ctgtaaggga cagcgagtgc cagtttgtaa ggagagatgc
                                                                     2640
caaggegate gtgtgcatet cacetetete caecetggge eccagecagg eccecateae
                                                                     2700
acttgccatt gaccgggcta acatctccag ccccgggctc atctacacct acactcagga
                                                                     2760
ccccaccgtc acccgccttg agcccacctg gagcatcatc aatggaagca ctgccatcac
                                                                     2820
tgtgagtggg acccacctgc tgacggtcca ggagccccgg gtccgtgcca agtaccgcgg
                                                                     2880
cattgagacc accaatacat gccaagtgat caacgacact gccatgctgt gtaaggcccc
                                                                     2940
eggeatettt ettgggegge eecageeteg ggegeaagge gageaceetg atgagtttgg
                                                                     3000
ettectgetg gaccaegtge aaacggeeeg eteceteaac egeteeteet ttacctaeta
                                                                     3060
ccctgatccc agetttgage egetggggee etetggegtg etggaegtea aacegggete
                                                                     3120
ccacgtggtg ctgaagggca agaacctgat tcccgcggca gccggcagct cccgcctcaa
                                                                     3180
ctacactgtg ctgataggag gccagccgtg ttcgctcact gtctcggaca cacaactcct
                                                                     3240
gtgcgactca cccagccaga ctggccggca gcctgtcatg gtgctggtgg gtggcctgga
                                                                     3300
gttctggctg ggcaccctgc acatctcggc agagcgggcg ctgaccctac cggccatgat
                                                                     3360
ggggctggcg gcggggggtg ggctcctgct gctggccatc acagccgtgc tggtggcgta
                                                                     3420
caagegeaag acteaggaeg eggaeegtae ceteaagegt etgeagetge agatggaeaa
                                                                     3480
cctggagtcc cgtgtggccc tggagtgcaa ggaagctttt gcagagctgc agacggacat
                                                                     3540
caatgagetg actaaccaca tggacgaggt geagateece tteetggaet aceggaetta
                                                                     3600
cgccgtgcgc gtgctcttcc cgggcatcga ggcccacccg gtgctcaagg agctggatac
                                                                     3660
```

```
gccacccaac gtggagaagg ccctgcgcct cttcgggcag ctgctgcaca gccgcgcgtt
                                                                     3720
cgtgcttacc ttcatccaca cgctggaggc ccagagcagc ttctccatgc gcgaccgcgg
                                                                     3780
                                                                     3840
caccgtggcc tcgctcacca tggtggccct gcagagccgg ctcgactatg ccacggggct
gctcaagcaa ctgctggccg acctcatcga gaagaacctc gagagcaaga accacccaa
                                                                     3900
                                                                     3960
gctgctgcta cgcaggacag agtcagtggc tgagaagatg cttaccaact ggttcacgtt
                                                                     4020
cctgctgcat aagtttctga aggagtgtgc tggggagcct ctcttcctgc tttactgtgc
                                                                     4080
catcaagcag cagatggaga agggccccat tgatgccatc acgggcgagg cacgatactc
                                                                     4140
cctgagcgag gacaagctca tccgtcagca gatcgactac aagacactga cccttcactg
cgtgtgtccg gagaacgagg gcagcgccca ggtcccagtg aaggttctca actgtgacag
                                                                     4200
catcacccag gccaaagata agctgctgga cactgtgtac aagggcattc cgtactccca
                                                                     4260
gegteceaaa getgaggaca tggaeetgga gtggegeaag ggeegeatga etegeateat
                                                                     4320
                                                                     4380
cctccaggat gaggatgtca ccaccaagat cgagtgtgac tggaagaggc tcaactcact
                                                                     4440
ggcccactac caggtgacag acggttcctt ggtggcattg gtgcccaaac aagtgtctgc
ctataacatg gccaactect teacetteac eegeteeete ageegetaeg agagettget
                                                                     4500
ecgcaeggee ageageeetg atageeteeg etcaegggea eccatgatta egeetgaeea
                                                                     4560
ggagacaggc accaaattgt ggcacctggt gaaaaaccac gaccatgccg accatcgcga
                                                                     4620
gggggaccgt ggcagcaaga tggtctccga gatctacctg acacggctgc tggccaccaa
                                                                     4680
                                                                     4740
gggcacactg cagaagttcg tggatgacct ctttgagaca gtgttcagca cagcccaccg
                                                                     4800
gggctcggcc ctgcccctgg ccatcaagta catgttcgac ttcctggatg agcaggcgga
ccagegecag atcagegace eegatgtgeg ccaeacetgg aagageaact geetgeeget
                                                                     4860
gegettetgg gtgaatgtga teaagaacee geagttegtg ttegacatee acaagaacag
                                                                     4920
catcacggat gcctgcctgt cggtggtagc ccagaccttc atggactcct gctctacatc
                                                                     4980
cgagcaccgc ctggggaagg actcgcctc caacaaactg ctctacgcca aggacatccc
                                                                     5040
caactacaag agctgggtgg agaggtatta tcgagacatt gcaaagatgg catccatcag
                                                                     5100
cgaccaggac atggatgeet acetggtgga geagteeegé etecaegeea gegaetteag
                                                                     5160
cgtcctgagt gcgctcaacg agctgtattt ctatgtcacc aagtaccgcc aggagattct
                                                                     5220
cacggetetg gaccgagatg cetettgteg gaagcataag ttgeggeaga aactggaaca
                                                                     5280
gatcatcage etegtgteca gegacageta aggtggtgga ateggtgagg agggggette
                                                                     5340
tragtrottyt googtootoo catoragggg agtggottggo traagcottgg gtoocogggo
                                                                     5400
tgagccctgg attgggtatc gtggggcagg tcaccctggc cacgatgccc ccggcacacc
                                                                     5460
caggeceect teattagtge ettgetttgg geeetgeagg gggaggggtg acagggegag
                                                                     5520
ecceacece ageageagea atacceceae ceteetgeee tgtgeeeagg tgttgggaea
                                                                     5580
gtcccaccct ccctgctatt tatatccctc tgcctattta ttgaatcgaa cttcgcctct
                                                                     5640
gtotocatot gtaaatatgt gtococcoac oggatgtogo caccotcact cacctgooto
                                                                     5700
ttettgaget gteetgggee etgeeaceeg tetgggetee tttgtgtage attateagee
                                                                     5760
teggtetgge etetggeace teaccettge catggetgae eccaeceatt ecaaggeggg
                                                                     5820
gtcacggtac cagcagcact tggggtgagg cctccaaaagc ttcctcagaa ttgtggctgt
                                                                     5880
gccacgctgg accacagggt cccctcaag catctcgggg ccctattctc tctgagcacc
                                                                     5940
tggagggetg gactcagget tgtgccaggg cctgacttgg gcctgggggc cctagaacac
                                                                     6000
tectectest gagestasty esaaacytes teagtyttyt etycacetys tecgastest
                                                                     6060
teageegeee catteagege eegeteegte eagtgeeege eetgtgggge caaggeggee
                                                                     6120
gtgccttact actctgtgtc ttctgcctcc tctgaggaat ctggccctgt ctgacagtcc
                                                                     6180
dagacccccc gttctctcct ctttagttgc atgagttttt ctttgttcat ggaatgtttt 1
                                                                     6240
ttcctgatta aatgttgggg aaatgccaaa aaaaaaa
                                                                     6277
```

```
<210> 5365
<211> 566
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (9)...(455)

# <223> similar to gil310709 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

### <400> 5365 egeceeega geacecette titgtatatg gecagggitg gicciettge agecetggge 60 ggacgacaca actettetet etgeeetgee ateggttaca ggtgggagat gtetgeatet 120 ctatcagttt acagagettg aacagtaact cagtttetca ggeeggetgt geteecteaa 180 gccagctggg tcccccccga gaaaggcctg agaggacggt cttgggatcc agagagctat 240 gtgacagtga ggggaagagc cagceggcag gagagggctc cegtgtggta gagcettecc 300 agettgagte eggtgeteag geetgetgge cageceegag ettecaaaga tacaqeatge 360 aaggggagga ggcacgggct gcgctgctcc gtccctcttt cattccacag gaggtaaagc 420 tgtccattga agggcgctcc aatgcgggaa aatgaacctc ttccccagac caggactggg 480 getttacccc agagectege etegeegeeg tgageaggea gaggatttge acaegeeega 540 gcaaggaatg ggctttctgg cagtgg 566

```
<210> 5366

<211> 902

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature
```

<222> (5)...(739)

<223> similar to gi908805 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5366
tggtctgtac tatggggaga ctgctcagat ccagtcccac atcagcgaca cgtccatcat
                                                                       60
cetgtecatg gacaacaacc ggaacctgga cetggacage atcattgetg aggteegtge
                                                                      120
ccagtatgag gagatcgccc ggaagagcaa ggccgaggcc gaggccctgt accagaccaa
                                                                      180
gttccaggag ctgcagctag cagccggccg gcatggggat gacctgaaac acaccaaaaa
                                                                     240
tgagatetea gagetgaeee gteteateea aagaetgege teggagattg agagtgtgaa
                                                                      300
gaagcagtgt gccaacctgg agacggccat cgctgacgcc gagcagcggg gggactgtgc
                                                                      360
ceteaaggat geeagggeea agetggatga getggaggge geeetgeage aggeeaagga
                                                                      420
ggagetggea eggatgetge gegagtacea agagettttg agegteaage tggeeetgga
                                                                      480
tgtggagatc gccacctacc gcaagctgct ggagggcgag gagtgcagga tqtccqqaqa
                                                                      540
atataccaac teegtgagea ttteggteat caacagetee atggeeggga tggeaggeae
                                                                      600
aggggctggc tttggattca gcaatgctgg cacctacggc tactggccca gctctgtcag
                                                                      660
cgggggctac agcatgctgc ctgggggctg tgtcactggc agtgggaact gtagccccg
                                                                      720
tggggaagee aggaceagge tggggagtge aagtgaatte agggaeteee agggaaagae
                                                                      780
cttageteta ageteaceca ecaaaaaaac catgagataa aagtgeaaca cageecattt
                                                                     840
cccagtagtc tgccttgccc tggcagactg ctccggactc ttctaggaaa ttcctctgtc
                                                                     900
                                                                      902
```

```
<210> 5367
<211> 1762
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1763)...(538)
<223> similar to gi34073 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5367
ttttttttt ttgaatgaca aaagcatttt attgaagatt cacctgcaga tggataagag
                                                                     60
ggaatgagag gagtagaatg ggacactaag tggttctcat cctaagcttg cagggccaag
                                                                    120
tgctgccggg tgttggagaa gtagttttgg ttctgatgta aatggataat accaggatct
                                                                    180
agtggggaga tggcattgga ctgggaaggg acatatgtga ccccaataat ttctggagat
                                                                    240
gacactectg gteattttet tetetgeeca tgggaggtga gaggteaget gacateette
                                                                    300
ccattccagg tgggtcacca ggcccaaatc aagaagtagc taccaaactc caagaggcag
                                                                    360
agtecetgte ecageacaga agateateet ggggeagaga gageecatgg gatagtggag
                                                                    420
480
agacaccagt gctgggccca gctggacaca gtgagctgca gggacctcgt ctcctctatc
                                                                    540
gtetettgtt cagggtggtg gtagagatga tettgetget ggaactgeca gagacactge
                                                                    600
caccaaaccc aaagccactt ccagagccgg agccaaagcc actactcagg ccaaacccgg
                                                                    660
agcccattcc taatcctccg ctgatgcctc cagtgctggt gctaccgctg accacagaga
                                                                    720
tgetcaegge actetggeat tetecagaea ttetgtaete etegecetee ageagtttge
                                                                    780
ggtaggtggc gatctcgatg tccaaggcca gcttcacact catgagctcc tggtactcac
                                                                    840
gcagcattcg tgccagctcc teettggcct gctgcagggc agcctccagc tctacgcgct
                                                                    900
tgctgtgggc atctttaagg gcattctcac ctcgctgctc tgcatcagcc acggatacct
                                                                    960
gaagagtetg geactgette ttgatgttet egatetetge eegeageete tggateatee
                                                                   1020
tgttgagete tgcaatttea etettggtgt tetteaggtt gteaceatgt tggteaaceg
                                                                   1080
agatetggag etgetggace ttggtetggt acagggette ageetcagee ttgeteetet
                                                                  1140
gggcaatete etegtaetgg geaeggaeet eggeaataat getgteeagg teeaggttge
                                                                  1200
ggttgttgtc catggaaagg accacggacg tgtcgctgac atgggtctgc atctgggaca
                                                                  1260
gctccgcatc atagaggacc ttcaggaagt tgatctcgtc attaagactg tccaccttgg
                                                                  1320
cctccaactc caccttgttc aggtaggcag catccacgtc cttctttagg accacaaagt
                                                                  1380
cattetegge tgetgtgegt ttgttgatet cetetteata ettagtettg aagteeteea
                                                                  1440
cgctgtcctg catggtcttc agctcagact gcaggcgccc tttgtcattg cccaaggtat
                                                                  1500
ctagctgctt cctcaggaca ctgaggtagg tctcaaagag gggctcaagg tttttgctgg
                                                                  1560
aggtggtggt cgtctgctgc tggagcaggt tccatttggt ctccaggacc ttattctgtt
                                                                  1620
gctctaagaa ctgcaccttg tcgatgaagg aggcaaactt gttgttgagg agcttgatct
                                                                  1680
gttcgcgctc ttccgtccgg actttctgga tctcagggtc aatctccacg tggaggggg
                                                                  1740
tgagcaagct ctggttgagt ga
                                                                  1762
```

```
<210> 5368
<211> 1935
<212> DNA
<213> Homo sapiens
```

```
<221> misc_feature
<222> (29)...(1271)
<223> similar to gi3645954 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5368
tggctctgca gcaggaagca cctacgaacc atcctccatg cgactggagg ccttacaggt
                                                                       60
attgactett etggeaaggg getaetttte aatgacteaa geetaettga tggagettgg
                                                                      120
agaggtgatt tgcaagtgca tgggggaagc agatccatcc attcagcttc atggagcaaa
                                                                      180
gcttctggaa gaactgggca caggcttaat acagcagtat aaaccagact ccactgcagc
                                                                      240
acctgatcag agagcaccag tettettggt ggtgatgtte tggaetatga tgetgaacgg
                                                                      300
tectttacce agagecetge agaatteaga acacecaact etceaggega gegeetgtga
                                                                      360
tgccctgtct tccatcttgc cagaggcctt cagcaatctg ccgaatgaca ggcagatgct
                                                                      420
gtgcatcaca gtgctgctcg ggctgaatga cagcaagaat cgcttagtga aagctgcaac
                                                                      480
ttcacgggcc ctgggagtct atgtgctttt tccctgtctc agacaggatg tcatatttgt
                                                                      540
tgcagacgca gcaaatgcaa tattgatgtc acttgaagac aagtctctga atgttcgagc
                                                                      600
caaagcagcc tggtccctgg gcaacctgac agacactctg attgtcaaca tggaaacacc
                                                                      660
agacccaagt ticcaggaag agttctctgg tctcctgctc ttgaaaatgt tacgatcagc
                                                                     -720
tatagaagca tccaaggata aagacaaggt aaaaagcaat gcagtccggg cccttggaaa
                                                                      780
tttgcttcat tttctgcaac cctctcatat agaaaaaccc acatttgcag aaatcattga
                                                                      840
ggagtetate caggeeetaa tttetaetgt tetaacagaa getgeeatga aagteegatg
                                                                      900
gaatgettgt tatgeaatgg gaaatgtatt taaaaateet geeetteett tagggacage
                                                                      960
cccatggacc tcccaggcct acaatgccct gacatcggtc gtgacatcat gcaagaactt
                                                                     1020
caaagtgcgc atcagatctg cagctgccct ttccgtcccg gggaagagag agcagtacgg
                                                                     1080
gtctgttgac cagtatgctc ggatctggaa tgcattggtc accgctttac agaagagtga
                                                                     1140
agacaccata gactttttgg aattcaagta ctgtgtcagc ctacggaccc aaatctgcca
                                                                     1200
ggcactgatt cacctettga gettggecag tgccteggae etecettgta tgaaagaaac
                                                                     1260
cettgaactg agtgggaata tggtecagte etatatteta cagtttttaa aatcaggage
                                                                     1320
agagggagat gacactggag caccccacag cccacaggaa agagaccaga tggtcagaat
                                                                     1380
ggcccttaaa cacatgggca gcatccaggc accaactgga gacacagcca gaagggccat
                                                                     1440
catgggcttt ttaggaagag atcctggccg tttgttttgg actcatctgg tttcacaagg
                                                                     1500
gggcactccc agggttaaca aatccagtga agatccccac ccatactttc ctagatgtcc
                                                                     1560
gaaggeggea gtaggaagga eetgaagett gageataage atetgtggga ttteateett
                                                                    1620
cggggcagaa acaatccgtt cacgtattta tttagaatga ccttagcagc ccatttaaat
                                                                     1680
tttcacagag ggctcaaccc acctttggag tgactcccat agcactggcc atggtcaggg
                                                                     1740
ttgttggaac atctgacctg tgcatcccag gagccgagga gtcaggttgt aataccaggc
                                                                     1800
caagcagacg ggctttgagg gcatttagtc tcagaaaaaa aaaaatgtag aaggatttcg
                                                                     1860
gaattagaat titgigtati gtatcigtag titigtaata aactaacgaa aaatagigig
                                                                     1920
tccccaaaaa aaaaa
                                                                     1935
```

```
<210> 5369
<211> 1293
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (58)...(418)
<223> similar to gi3941728 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5369
ggctttggga ggggagccct gatccgcctg aatatctggc cggcggttca aggggcctgc
                                                                       60
aaacagetgg aggtetgtga geaetgegtg gagggagaea gagegegeaa teteteeage
                                                                      120
tgcatgtggg agcagtgccg gccagaggag ccaggacact gtgtggccca atctgaggtg
                                                                      180
gtcaaggaag gttgctccat ctacaaccgc tcagaggcat gtccagctgc tcaccaccac
                                                                      240
cccacctatg aaccgaagac agtcacaaca gggagccccc cagtccctga ggcccacagc
                                                                      300
cctggatttg acggggccag ctttatcgga ggtgtcgtgc tggtgttgag cctacaggcg
                                                                      360
gtggctttct ttgtgctgca cttcctcaag gccaaggaca gcacctacca gacgctgtga
                                                                      420
gtacctggcc agcagcaagt acctgagtcc cagetcacet eetggtteet geeceaeegt
                                                                      480
teceetteag tacceagggt getgtettet ceatgggeaa geceteagga eggtgacage
                                                                      540
gtgctccatg tgagccacac cccttttgtc tcctccagtt ggggtgtttc ctttgtcaga
                                                                      600
tgttggctgg gaccaggact cagcctgggc cagtctagga gcccagctga gccctcctgt
                                                                      660
gtcttttccc ttcatgctgc cagcagggaa gagaaccagt aggtgccagc ccaggcaagc
                                                                      720
ctgtggcccg cgtttctgtg gctgtgggca ggagctgggc cttgtgtcta gttgggtttt
                                                                      780
getetgagaa ggggagetgt geetgaggee etetgtgtge egtgtgtget gtggggeggg
                                                                      840
tegecacage etgtgttaaa gtgtttgete tteetetget geeteetete gaggeagggg
                                                                      900
gtccttggct ggctgaggca gtgtcacctt cctgagtgtc ctctttggcc tctgcagaat
                                                                      960
ctgacccctt tgggcctgga ctccatcctg aggggaaagg aggatgcaga gggtggcctc
                                                                     1020
tgggcaccct tgtgggtaag cggggggcgg gggcgggaaa aactctggcc gccagttttt
                                                                     1080
ggctcctgcg ggcaccaagc aggccaagtg tttaatgcct gacatctcct cctgtcctgg
                                                                     1140
gcctggaacc tgcagctgag aaaatccctc aaccacctcg tctcctccat cgccctgct
                                                                     1200
gggcccccca gccctgacag tgggttgtat gcctgcctct ttccaccaac tggcctgggc
                                                                     1260
actgcccca aataaaggaa ctctgcactg caa
                                                                     1293
```

```
<210> 5370
<211> 1890
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1892)...(740)
<223> similar to gi1595868 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5370
tttttttttt ttggtaaaat agctttatcc tctgtcagaa cacaaacaaa caaactttga
                                                                       60
gaggggagga aggaaaccgt ctagctcagg gctcacttag gagagggatg agattagaaa
                                                                      120
gttcaacaca ctgcttgtgc agctggagat aaagtcaaga ccctagcacc cacttataaa
                                                                      180
tatctcgtta tattaaaaaa aaaaaaaatg tccagggccc acctggctct gctcctgcac
                                                                      240
agaaagggtt catcttcact ttgtgatctc acaggtcatg gagtgagggt ggtagagagg
                                                                      300
ggcagaaatt tcagggggag gggtggctgg gaaaaagtaa aggggacaag ccaatgtgta
                                                                      360
actagegete tecaagacat geagaggagt gggggtggee tgteagggge tgaaaagaaa
                                                                      420
agecagtget gtacetgggg ggttgtetea etectgteee cacaatecet gatacteegg
                                                                      480
agtgatctgt cctttcagac acccactgtg aggtcccaat atcggggttt atcctttcct
                                                                      540
cagtcccagc ctgttcagct ctccaaccaa gttttggggg cccctctaat gggggggatg
                                                                      600
```

```
gccccagttg cttaggcctc tgaggtcaac ccctttacat cacagccctc tccccaaata
                                                                      660
agaagcatga ggtgagctgg aggaccetee etgggaggag ggtgttetgg ggggtgagee
                                                                      720
agttttgggg teeceettea gteeetgaee aggeggtaaa tgtgatgetg ggeeeeaege
                                                                      780
tegetggtgg agacetegaa gacataggeg gtgeagagea geagtteetg ggtgtetetg
                                                                      840
tttgtcacca cctggaggat ggtgaagttt tccaggacgc tgttcatcat gtatcgctca
                                                                      900
ggcagetgcc gcaacttgtg caagaagttc accaggtact cgcacatggg cgagcgcagc
                                                                      960
aggeggtaca caaatetgee gteeteeage tgggeeegtt eegteteeae etteteeaee
                                                                     1020
acctgcttgc caaaagagca gaccttggag gaacaggtga gggtcatgtg ttccaggctc
                                                                     1080
tcatactggc tgetcaetee gtagaageea ceaetgetga tgetgeeaee ggeeeetgee
                                                                     1140
tecteaceae ttgggeecea gtteaggtee geceagaaet tgaceaggaa gaaggeatgg
                                                                     1200
ggggggccac gatcatatag ctctcggagg ccaccetttt tctcagggaa tttgtcgtag
                                                                     1260
atctgccgga cgtccacact ctcgagcggc ggcgctccgg ggctggggca gtgctggctg
                                                                     1320
atgtgcacga acaggtgcct ctggtaagaa tcaactgcat ctggcggttc cacgaaggct
                                                                     1380
gagaacteta ecagetgeaa eegggeggtg eecaggeeee gageetgeea ggetggggge
                                                                     1440
gatggggtag gtgggggcag gggtgagagg gcttgggggg gctcgtaccc tgggaggtca
                                                                     1500
gtagatgggg gagtcagtga caaggtgaac ggtgtctgtg agaatggctt cacatctgga
                                                                     1560
acattccagg ggggcccaga tcctccagac caaaactgga aaagctcaga ggcctggacc
                                                                     1620
acctgaggac cagtgggacc cagtttggcc tgcagagaag gcgcggagat gagctgggca
                                                                     1680
gaggacatgg ttgccattgt ctggaaagcc ttgtccttgg aaacctggtc cacgttcaga
                                                                     1740
gccttcaact tggactggat ttcccttgat ttccttcggg ccaaaccctg gatgtgacta
                                                                     1800
gaaacctgtt ttcgagttcg ggtcttcccc gttctcagct tgatgtagcg ggcgatcagt
                                                                     1860
tcattccgac catacatctt gccttcatca
                                                                     1890
```

```
<210> 5371
<211> 1046
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) ... (1047)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (696) ... (220)
<223> similar to gill76422 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5371
gggctcagac aggtctgacc agtctttaat gggcaggcag gtgcccgagg cagcctccag
                                                                       60
catgaggcgg gacaggcatt gcccggaggt cctctgggtg gggagggcat gctcggtgct
                                                                      120
tgctgccagc tggagccagg gctgaggcgt gcagggatcc ctggccctca cggccaccct
                                                                      180
gggtgcttca aggatgaggg cggagctggc ttcactgggg cacagggctg ggggcagcct
                                                                      240
ccagtcttgc cctgctgggc ctttcggctc cagttgagga ggggccgggg actggcccac
                                                                      300
gtggatgccg gggtcttgca accatgctcc ctctggctcc ttagaagccc cctggggccc
                                                                      360
agcaggacgg gccggcggtc ccccaagctg ggcagtctag agctgggcag cagcgacacc
                                                                      420
acctgcagge tggcgcccgc ctctcccgca gccttcagct ccgtcaccac ctccgcgtgt
                                                                      480
ctccaccacc tgcatggctg cccattcact gacacaatgt agtcgccctc cttcaggcca
                                                                      540
gccgccgcgg cctggctccc tggaatgacg gcagcgatga ggacaggcga gtctccccga
                                                                      600
```

```
agegtgagge caaageegee eteteetegg gteaggtgga egggeeeeac cageegeeac
                                                                      660
cggttcttgg ctgagaacac agacaggggc ccctggcagg ggctcagagg tcagaggccc
                                                                      720
agetgggeca cacactgagg agaccecace tgactageac atecatecaa cetgtgeace
                                                                      780
gagggacacc gtggggttcc acaaggtggg tggggagggc tggaccacca tcaatggcct
                                                                      840
                                                                    900
gtctgaggcc atgtgctggt cagagccaca cagcccaagc tgcccatgct gggcggtgcc
tggggacggg tgtgctcacc agccgatgga agatgtcagg ccccttcccc tgggacaggc
                                                                      960
gtggcatcct ggcctctggn nttccnccgc nctggcgcag tggactcagg tttttcaatt
                                                                     1020
ggnggggng ccctggaacc ataaca
                                                                     1046
```

```
<210> 5372
<211> 1020
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (437)...(839)
<223> similar to gi3868778 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5372
agctgtgtaa aatatttgtt gtgcttgttt agaattgaat tgtaatgttc taaagcgagc
                                                                       60
aattatttct taccatggaa gctgccaaac ctctaatact tctatacttt gccagtgtgt
                                                                      120
ctaaattgca ggagatattg gtaccctaag cagaacagac acaaccttct cagacacagg
                                                                      180
aggatgaccc tgtttctaaa tagctgcaca gtctagttct ctctcctgtt tactcgttgt
                                                                      240
tagtttagtt gtctaagact atgegettge tgaggacagt catttttgaa ttetecagee
                                                                      300
cctatcgcag tgtctggcat gtgatgagag aacaggaata tttgttgaaa agtgaaaatg
                                                                      360
catattecat decatectge ecectteet coeteteet ecttetteet acceteacae
                                                                      420
taacctttgg gttttgcttt ctaggcaaag caggaaaaat gccagctcgg tctcccagga
                                                                      480
ctcttgggag cagaactact cccctgggga aggcttccag agtgccaaag agaaccccag
                                                                     -540
gtactccage taccaagget ccaggaacgg ctacctggga ggacatgget tcaacgccag
                                                                      600
ggtcatgctg gaaactcagg agctccttcg ccaggaacag aggcggaagg agcagcagat
                                                                      660
gaagaagcag ceteetteeg aggggeecag caactatgae tegtataaga aagtecagga
                                                                      720
ccccagttac gcccctccca aggggccctt ccggcaagat gtgcccccct ccccttctca
                                                                      780
ggttgcgagg ctgaacagac ttcagactcc tgagaaaggg aggcccttct attcctgagc
                                                                      840
acgcaaataa cggatgcttc atgtcgcgca ataaaagaca ttttcctatg aagacttgta
                                                                      900
ttttgggagt ttttttaaaa cctcgatggt actatggagt atttctgttg ttggtatcag
                                                                      960
tgcctttaag cggtgtaggc aaagaaatgg aaggccttaa tgtctttgcc actatgtctc
                                                                     1020
```

```
<210> 5373
<211> 1476
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

<222> (3)...(576) <223> similar to gi4164385 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5373
agggaggagc cctcacagac atcgtctccc aagtcaggct gaatgaggag cagattgcca
                                                                       60
ctgtgtgtga ggctgtgctg caggccctgg cctacctgca tgctcagggt gtcatccacc
                                                                      120
qqqacatcaa gagtgactcc atcctgctga ccctcgatgg cagggtgaag ctctcggact
                                                                      180
teggattetg tgeteagate ageaaagaeg teectaagag gaagteeetg gtgggaacce
                                                                      240
cctactggat ggctcctgaa gtgatctcca ggtctttgta tgccactgag gtggatatct
                                                                      300
ggtctctggg catcatggtg attgagatgg tagatgggga gccaccgtac ttcagtgact
                                                                      360
ccccagtgca agccatgaag aggctccggg acagccccc acccaagctg aaaaactctc
                                                                      420
acaaggtete eccagtgetg egagaettee tggageggat getggtgegg gaeecceaag
                                                                      480
                                                                      540
agagagecae ageceaggag etectagace acception getgeagaca gggetacetg
                                                                      600
aqtqcctqqt gcccctgatc cagctctacc gaaagcagac ctccacctgc tgagcccacc
ccaagtatge etgecaceta egeceacagg cagggeacae tgggeageca geetgeegge
                                                                      660
aggacttgcc tgcctcctcc tctcagtatt ctctccaaag attgaaatgt gaagcccag
                                                                      720
                                                                      780
coccaccete typecetteag cetactggge caggeoggae etgececete agtgtetete
cctcccgagt ccccagatgg agaccccttt ctacaggatg accccttgat atttgcacag
                                                                      840
ggatatttct aagaaacgca gaggccagcg ttcctggcct ctgcagccaa cacagtagaa
                                                                      900
                                                                      960
aaggetgetg tggtttttta aaggeagttg tecactagtg teetaggeea etgeagaggg
                                                                     1020
caqactgctg gtctccacag atacctgctg ttctcagetc cagettcaaa cctcgagtct
cgagagggcc acggggtggt ttttatgacc ggaatcccgc ttcctccctc acgtctgatg
                                                                     1080
tectgaaggt geagteecac etgtacagee ceteceegee aagaactgtg aatggeetge
                                                                     1140
tccaggccat ggctgggggc agggagtgag gggacaattt ctgagtgaaa gagaaagaat
                                                                     1200
                                                                     1260
ggggtcggtg gtgaaggtgc tctcacttta cagaatggag agaacatcgt gtgtgtgtgt
                                                                     1320
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt gtgtgtaagg ggaggaaagc caccttgaga
gtccaggtct ctataggtca cccacagaca gtttgaggag ggctgcctct ctctcccact
                                                                     1380
                                                                     1440
aatttetgge etgaagggae etgetttatt ggtgtgtett ecacetetae actegtgtgt
                                                                     1476
atacctggcg agtggagtgg tccacgctat gtctca
```

```
<210> 5374
<211> 1687
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1683)...(1055)
<223> similar to gi2739433 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5374
geggeegeat etggeteete cagggatteg geggeggge tgecaggetg aggeteggeg 60
tegeggteet egggaggee cetetetget ecaggtgeae teattteate egtegageet 120
tteagtttgt tgetaageet gaaggtetet aagattttgt ettetgggag agacageaa 180
ggageaggea teaactttee aggaagaeeg tttgeettag eaaagggatt ttetgagtge 240
```

```
agggcaggct ggccttggca gctgggcacc atcaggcgct aggccgtttt ctttcgggtc
                                                                       300
 actgtcgctg tctgcactat tagcaccgtt tagggtcatg ggttcttgaa gctcgtgcgg
                                                                       360
agtggcctcc tcatcttcgg catcttggcc gggagagtgg gagctcacaa tcgtaccaat
                                                                       420
 cccattetee ttgeccagee cetttgacte etegtcagag tectcagagg acteqqeqee
                                                                       480
atagggcacc agcacgctgg agttcagctt ggatttgcca ttcatcacgg gctgggagca
                                                                       540
ggattcactg cgggggatcg gttttgttac tttactagaa actgacatcg tagatgcgtt
                                                                       600
cgaggtagac tgtactgcag aattggtaat ggtagaaaag ggaacgggct tggtagggtt
                                                                       660
ctccaaagaa ttactatgaa ggttaggttg agactgacac tggcgaacag gcaacttgtt
                                                                       720
gtgaatactg attgtaattt tttgtttctt aggatgttct gggatcactg aggacctatt
                                                                       780
aactgaccag ttttggacag aagctgaagc attaacagga ctagccctgt tgacactgga
                                                                       840
attocogtta ggactogaca tggaactgot tggogtgtot ttcaatggto cagtoccatt
                                                                       900
taagtgaggt ggattettta teatgtgaga gggaagetgt ggteegataa ageetggege
                                                                       960
agectgtttg ttggtgacaa ceegetgact gatgaegggg eggggagagg aetggeeggg
                                                                      1020
gctatgggtg ggatgagtaa gttcacctcc atttttcaca tcatgggacc tgatataaaa
                                                                      1080
gagcacatag gettgttgge tgagtacega tetaatatea etggtagata caatggagte
                                                                      1140
attcatttga taccagaggc cattgctagc ttttatgtag cagaagtaat ggccagcatg
                                                                      1200
gcaattaaaa ccagtgtgga ccagcactgc atacaagacg tagacaattg gctctccgtt
                                                                      1260
gggttgagac atatatggcc gaatatcaag atactcaggg tatttcacat ccttagcaat
                                                                      1320
ttttccaccg gtaaaatttg caaaacgttt cagagaaagt gtaagaacat tagaggatct
                                                                      1380
atggatagtg aacctetttg aagetggaac catettttta caettgetge aettgtaega
                                                                      1440
gtttteteca teaagetgtt ceggetteae aaactgetee aatgeettgt tgacactetg
                                                                      1500
agcagcettt atetecaatg ttatateaag atatggatea aaagtatetg aaaegeeett
                                                                      1560
gcaatttaaa catttgactc tagatcttag gtatcctcca aatatctgac aaacaagagt
                                                                      1620
ggtggcctgg gtgtgtctgt ctaatttatt gctgccattc aagcatgccg acgcgtgggt
                                                                      1680
                                                                      1687
```

```
<210> 5375
<211> 789
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (790)...(382)
<223> similar to gi162781 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5375
ggtttaaaaa aatcattett accaccaata cagcaattaa taaagtteet actetttgga
                                                                       60
atttattcac taaataagca ccacctttta aaatctactc cattagaact ctacccaca
                                                                      120
acctccccac catatatatg caagtccata taaatccaaa tctcaaaaag ctgatataca
                                                                      180
aaccactcag aacatttttc gtgaaatatc tgttttaatt cagcagtaaa aggcagcaca
                                                                      240
tgatcagaaa tatgtagggt tgtgaaagag cttgccagga aatgagagct gttgcacagg
                                                                      300
gtatcagcaa ctgtgtacag cttggcaagg ttttcagtcc tgtcctccag ggaggatctt
                                                                      360
gactteteag treceaette aggaatacat ggreaactge agecaetett tgatagacae
                                                                      420
ttgaatcagg ccatctctat ctctatccag agacttgaag gcacgaaaca tggcatccag
                                                                      480
gcggaccaag cagctgatga aattgttaaa atccatatct ccatcttcat tagcataccg
                                                                      540
geggaeaate atttggtaaa gttgtteatt tagetggaag eetgeggeet geagagetee
                                                                      600
ccgcagctga gaacttccca gagacccaga atggtccctg tcatactgct tataaacaca
                                                                      660
ctgccatttc ttgatgttgt tccacagata cttaaattct tcaaagccca gcttaccagt
                                                                      720
```

```
<210> 5376
<211> 2142
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (129)...(1308)
<223> similar to gi3877668 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5376 aaggaaatca gcaagagaaa gaaaggtctg tggatttaaa ctttcttcca tcggttgatc 60 ctgaaacagt tcttcagaca gggcatgaat tgttgtccga attacagcag cgtcgattta 120 atggeteaga eggaggggtt teatggtete etatggatga tgaaettett geacageeae 180 aggttatgaa attattagat tcactccgag agcaatatac ccgctaccag gaagtttgta 240 ggcaacgtag caagcgcaca cagttagaag agattcaaca gaaggtaatg caggtggtga 300 actggctaaa agggcctgga tcagaacaac taagagccca gtggggcatt ggagactcca 360 ttagggcctc ccaggcccta cagcagaaac acgaagagat tgagagccag cacagtgaat 420 ggtttgcagt gtatgtggaa cttaatcagc aaattgcagc actcttgaat gctggcgatg 480 aggaagatet tgtggaacta aagteactge ageaacaact tagtgatgtt tgttategae 540 aggecagtea getggaattt aggeaaaate tettacaage agetettgaa ttteatggtg 600 ttgcccaaga tttgtctcag cagttggatg gcttattagg gatgttgtgc gtagatgtag 660 caccagetga tggageateg atteageaaa etttaaaaet gettgaagag aagetgaaaa 720 gtgttgatgt gggattgcaa ggtttgcgtg aaaaaggtca aggtctcctg gatcagatct 780 ccaatcaggc atcctgggcc tatggaaagg atgtaaccat tgaaaataaa gaaaatgtgg 840 900 accacataca aggagtgatg gaagatatgc agcttagaaa acaaagatgt gaagacatgg tagatgtgcg aaggttaaag atgcttcaga tggtgcagtt gtttaaatgt gaagaagatg 960 ctgcccaggc agtagaatgg ctaagtgaac ttctggatgc tctgcttaag actcacatca 1020 gattgggcga tgatgctcaa gaaacgaaag ttttgctgga aaagcataga aaatttgttg 1080 atgttgcaca gagcacttat gactatggca ggcagttgct acaggccaca gttgtgttat 1140 gccaatcttt gcgctgcact tctcggtcat ctggggatac acttcctcga ctgaacagag 1200 tatggaaaca atttacaata gcatctgaag agagagtaca tagattggaa atggctattg 1260 catttcactc aaatgctgaa aagattttgc aggactgtcc agaagagcct gaagctatta 1320 atgatgagga gcaatttgat gaaattgaag cagttgggaa atcacttttg gatagattaa 1380 ctgttccagt agtttatcct gatggaaccg aacaatattt tgggagtccc aagtgacatg 1440 gettetactg geagaaaaca teagagacag gatgaaacta gttaatetea aaaggeagea 1500 gctgagacat tctgaaatgg tgaccacaga gagctaatag ctaccagcta cctacagatt 1560 tgcagttcat aatcccgcat gttgtcaaca tactacagca ttagccacca caccttaaga 1620 tgcatttcac agccaaaata agtctcattt cttttcatga cacatttctc tttacatgtt 1680 aacaccttgc tactaccaag gcataattac ttaacatgct tcgaggctgt agattccaag 1740 tatettaaaa gaaggaacta taaacattge actgaaaact tgetttaaag etttacetga 1800 cctgtcagtt tgtagacaaa caactgataa taagctttga atggtgctaa taagagtagg 1860 aattototot attaaaaaga aaaaaaaaag ttgcccttcc tccacaggtg atttattaaa 1920 tttagacagt agttaaactc ttgttagtag acaggggtgt cctcaaaatt ttactttgta 1980 attetteaaa attgattatt tttattgtgt caatacagag aaageettte agatetttga 2040 tatatcatag tcattaaaag accttttcct atttgtattg ataatgtatt aaaagttgtt 2100

```
<210> 5377
<211> 922
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (925)...(207)
<223> similar to gi3868802 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5377
tttttttttt tttgacttgc aacaggaaga acttttattg aaacaccacc atagagaaaa
                                                                       60
agccaaagaa atggtactat totaaaaata acttgtotta attoattgga agaaaagcag
                                                                      120
aaaaataagg ggacccttat ttaggaaact agcttcattt tggtatttta atttgggggc
                                                                      180
cattetgtet cagaggetgg agttcaggaa gacaccetet gttcattett gttgttgaet
                                                                      240
ttggtggatt tetetteeae agtgtgaact etggatgaga gaactttgee acgaggatet
                                                                      300
attituteaa caactgitti gacaatggig gittitagatg aattititgi tigatticci
                                                                      360
gggcctccat agccttttga tttagaacag gagccatctt ctccatctat caggaggcag
                                                                      420
taggteteaa tttettttte eaggtggace ttgatgteaa ggagetgete atactegage
                                                                      480
ttctggccct cggtctcggt tctgacctgg tgcagctgct cctccagggc cccgatctga
                                                                      540
gcctggatct gtgccagctg tgcacagtag ttactctcgg tctctgtcaa ggagcactcc
                                                                      600
agggagtgtt tegttgetaa gagggaetga agtteaatet caagggtttg aagagtgegt
                                                                      660
ttcatctcgg taagctcatt ccgggctgag gtggtggcgc cagcgtcgtc agagatctgc
                                                                      720
tgctgcagcg aggcgctctt ttcgttgaac caggcctccg cgtccctgcg gttctgctct
                                                                      780
gegagggett egtacteage tegeatattg tteageagaa cegtgaggte tacceegggg
                                                                      840
geogegitea tetecaegit caegitgeet ceageogege actgaagage titeatitee
                                                                      900
tecteatgat tettettgag ga
                                                                      922
```

```
<210> 5378
<211> 2897
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)...(1969)
<223> similar to gi5081610 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5378

cccacgcgta	cggccaggtg	ggagtgaaga	ttgtgatgtg	ttggaggcca	cccagcccct	60
ggaacagggg	ttcctgcagc	agctggagga	gggccccagc	agttctggac	agcatcagcc	120
acagcaggag	gaggaggaat	caaagccaga	accagagagg	tctggcctca	gttggagcaa	180
ccgggagaag	gcaaagcagg	cattcaagga	actgctgagg	gacaaggctg	tcccctccaa	240
tgcctcatgg	gaacaggcca	tgaagatggt	ggtcaccgac	ccccgttaca	gtgccttgcc	300
taaactgagt	gagaaaaagc	aggcattcaa	tgcctacaag	gcgcagcggg	agaaggagga	360
gaaggaggag	gcccggctaa	gggccaaaga	ggccaagcag	accctgcagc	atttcctgga	420
gcagcatgaa	cgcatgacct	ccaccacccg	ctaccggcgg	gcagaacaga	cctttgggga	480
gctggaggtc	tgggctgtgg	tccctgagag	ggatcgaaaa	gaggtttatg	atgatgtcct	540
		agaaggaaca				600
ggccctaaag	agcatcctgg	atgggatgag	tagtgtcaac	ttccaaacca	cgtggtccca	660
ggcccagcag	tacctcatgg	ataaccccag	ctttgctcag	gaccatcagc	tgcagaacat	720
ggacaaggaa	gatgcactga	tctgttttga	ggagcacatc	cgagctttgg	agagggaaga	780
		cccggcttcg				840
		acgagetgea				900
		cagtcagcac				960
		acttattcaa			A CONTRACTOR OF THE CONTRACTOR	1020
		ttaaggacat				1080
		tcgcccacgt				1140
		tgaccttcaa				1200
		aggcacgcag				1260
		ctgctctgga				.1320
		cctttgagca	· ·			1380
		tgctggagac				1440
		agaagcacca				1500
		tgccccacc				1560
		ctgagccctc				1620
		gctcccettc				1680
		aaaagaaaac	the state of the s			1740
		aggagaaagc	and the second s			1800
		tccaacaggc				1860
		gctgggacac				1920
	+	tcctacagca				1980
		gtgaggccat				2040
		tggtctgtgt				2100
		ctctcaaggt				2160
		ccctcagccc		*		2220
		ataaaagtgt				2280
		gtggcagagg				2340
		ctgaggctcc				2400
		ttttttaaat				2460
		aggctgggga				2520
		ccctttgtgt				2580
		ctcctccaaa			-	2640
		gactaaatgg				2700
		catcaagcct				2760
		ggtggtacat				2820
		ggaaggtaag				2880
ccctgccaaa				•		2897

<sup>&</sup>lt;210> 5379 <211> 2214 <212> DNA

## <213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1) ... (1084)
```

<223> similar to gi4731361 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5379
                                                                       60
atgraggegg teegegeeac tgeeteteag teeetgteet gegeeegege geeeegggag
cctacccage acgegetecg egeceaetgg ttecetecag eegeegeegt ecageegagt
                                                                      120
ccccactccg gagtcgccgc tgccgcgggg acatggtcct ctgcgttcag gggtgagcac
                                                                      180
ccccttgtaa gctcagggct actgttgggt gtcagggaac aaagttttag actgctgcgc
                                                                      240
                                                                      300
tccaaagcgg gcacacacat gtacctagaa cacaccagcc actgtcccca ccatgatgat
                                                                      360
gacacageca tggacacace cetgeceaga cetegecett tgetggetgt ggageggaet
                                                                      420
gggcagcggc ccctgtgggc cccgtccctg gaactgccca agccagacat gcagcccttg
cctgctgggg ccttcctcga ggaggtggca gagggtaccc cagcccagac agagagtgag
                                                                      480
                                                                      540
ccaaaggtgc tggacccaga ggaggatctg ctgtgcatag ccaagacctt ctcctacctt
egggaatetg getggtattg gggtteeatt aeggeeageg aggeeegaea acaeetgeag
                                                                      600
aagatgccag aaggcacgtt cttagtacgt gacagcacgc accccagcta cctgttcacg
                                                                      660
                                                                      720
ctqtcaqtqa aaaccactcg tggccccacc aatgtacgca ttgagtatgc tgactccagc
ttccgtctgg actccaactg cttgtccagg ccacgcatcc tggcctttcc ggatgtggtc
                                                                      780
agecttgtgc agcactatgt ggcctcctgc actgctgata cccgaagcga cagccccgat
                                                                      840
                                                                      900
cctgctccca ccccggccct gcctatgcct aaggaggatg cgcctagtga cccagcactg
cetgeteete caccagecae tgetgtacae etaaaaetgg tgeagecett tgtaegeaga
                                                                      960
ageagtgeec geageetgea acacetgtge egeettgtea teaacegtet ggtggeegae
                                                                     1020
gtggactgcc tgccactgcc ccggcgcatg gccgactacc tccgacagta ccccttccag
                                                                     1080
ctctgactgt acggggcaat ctgcccaccc tcacccagtc gcaccctgga ggggacatca
                                                                     1140
                                                                     1200
gccccagctg gacttgggcc cccactgtcc ctcctccagg catcctggtg cctgcatacc
                                                                     1260
tetggeaget ggeecaggaa gagecageaa gageaaggea tgggagaggg gaggtgteae
                                                                     1320
acaacttgga ggtaaatgcc cccaggccgc atgtggcttc attatactga gccatgtgtc
agaggatggg gagacaggca ggaccttgtc tcacctgtgg gctgggccca gacctccact
                                                                     1380
                                                                     1440
egettgeetg eeetggeeac etgaactgta tgggeactet eageeetggt tttteaatee
                                                                     1500
ccagggtcgg gtaggacccc tactggcagc cagcctctgt ttctgggagg atgacatgca
gaggaactga gatcgacagt gactagtgac cccttgttga ggggtaagcc aggctagggg
                                                                     1560
actgcacaat tatacactat ttatttattt attctccttg gggttggtgt caggggcgag
                                                                     1620
                                                                     1680
ccaaccccac ctctatgccc tgagccctgg tagtccagag accccaactc tgccctggct
tetetqqttc ttecetqtqq aaaqeecate etqaqacate ttqctqqaac caaqqeaate
                                                                     1740
ctggatgtcc tggtactgac ccacccgtct gtgaatgtgt ccactctctt ctgcccccag
                                                                     1800
ccatatttgg ggaggatgga caactacaat aggtaagaaa atgcagccgg agcctcagtc
                                                                     1860
cccagcagag cctgtgtctc accccctcac aggacagagc tgtatctgca tagagctggt
                                                                     1920
cteactgtgg ccgcaggccc cggggggagt gcctgtgctg tcaggaagag ggggtgctgg
                                                                     1980
                                                                     2040
tttgagggcc gccactgcag ttctgctagg tctgcttcct gcccaggaag gtgcctgcac
atgagaggag agaaatacac gtctgataag acttcatgaa ataataatta tagcaaagaa
                                                                     2100
cagtttggtg gtcttttctc ttccactgat ttttctgtaa tgacattata cctttattac
                                                                     2160
ctctttattt tattacctct ataataaaat gatacctttc atgtaaaaaa aaaa
                                                                     2214
```

<sup>&</sup>lt;210> 5380 <211> 1512

<sup>&</sup>lt;212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1515)...(918)
<223> similar to gi1228052 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5380
ttttattttg gtagttgttt ttatggatgt gaaaaatatt accactgcaa ctagcaagaa
                                                                    60
                                                                  120
ctataaatga tacattattg caagtgttct aaaaaatcag gaacaaaact aatttattat
agttctgtct tcattataca ccacgtgttg gtgagttaaa cacaacaaaa ttgtcttttc
                                                                   180
ttttaaaagt gtctactaaa gataaaaaga ataagataac aattaacatg tagtttgtta
                                                                   240
cattaaaaaa totgatatac atatttotat tooctottag ottottotaa qootottaa
                                                                   300
ctattacaac aaaaaaaaa aaggaaagaa aaagaaaatt cattgtttaa aggcaaacat
                                                                   360
tcaattcagt tgatacaaca ttacagtaca gtcaactaac atcattcaac gaaggtaaca
                                                                   420
agtitagect tagettettg agtitaaaagt ctatagacca gattgetaca aaagtiteaa
                                                                   480
tgctgcttca aaaccgtatg ttagcttttt ggaggacaaa gtactttcta cggatggctt
                                                                   540
cagaaggggt catgctactg gtaaaagcac aggggaaccc catcctgtca ttaatcattt
                                                                   600.
660
ataatataat aacaatcata ataatgataa gaataaaaac caaacacaga ctggaagcct
                                                                   720
agagtegetg geageegtgt caaaccettg egataegeta tactaaaaaa atttgaaata
                                                                   780
tecaceegte etetecacte tgecacaaac tagcaaagte aaaaatacaa aagtetteaa
                                                                   840
cttgttcact tttgcagaat aaagcaaaaa cgtctttgtg ctccttacta ccagaaqcaa
                                                                   900
aatatcctct gagttaccac atgtaatagc ttctggatgt gtcgacctgg gttggcttgg
                                                                   960
tgtctgcaga accatctttg tctttctcgc tgtcaccttc ccagaggtta atgagtggtg
                                                                  1020
ggtacagete atttagtggg attgaagagg ttttttgcat atacttttt aatgagtggt
                                                                  1080
ggtagttttt tetettaaat ettttggcaa agtacacage aatggacgca aggetaatga
                                                                  1140
cggcaaacat agaccccatt actgcagcaa gggctgtact ggtttcttga tcagagatgt
                                                                  1200
ccactgogaa ggoggcattt ttggttgtga catttacgca tgacttttga qtctqctqat
                                                                  1260
gaatattgga cactgtgaga cacacttcat aatctgtgga aggetgcaga tgegttaggt
                                                                  1320
tgtattcatg gacatcgact gggaccctgg cagtatatgt tatgtgaggg ttatcaatct
                                                                  1380
teatggtgge agacgaccat tttaagtttg acgteatgae attggaatta actttecagg
                                                                  1440
acactaagat ggaatgggat tetgtetget tgaegtatat ttttageace tgggtaecat
                                                                  1500
ccagaagggt cc
                                                                  1512
```

```
<210> 5381
<211> 2197
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2195)...(580)
<223> similar to gi2924552 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5381
tttttttttt tttaatgaaa atatgtgaca cttttattta caagettttt tgcataaact
                                                                       60
atacttaaca tgactaaaca acaaaaagtt cttgacttcc atcctttatg ggtagaaaaa
                                                                      120
taaattattt taataqttat ttaaacatgc ctcctgcttc caqaqaaatt aatqtqttaa
                                                                      180
atatatatat ttttcaaatt atccctaaca tttacacaaa cttgagtaga tactgctcta
                                                                      240
tttttacaca gaattgtaaa cagcetttta aaaagetaga gtaactttee actagttaga
                                                                      300
actgaacatt gtaaaatata aaaattttat aaaccctata atgcaggtaa tttaattatg
                                                                      360
actgatctgt aggaatatac aataaaaatt tgtcagtcat ccacaattaa gtacaattat
                                                                      420
ttatggagaa aaattttact atgtccagaa aaagatttta ttcatgttct tgaaagatag
                                                                      480
ctttgttccc aataaatatt ccctcctact atttttgtac attttaggaa aagatgtatt
                                                                      540
cagttcaaaa ataagtaaca tccagttatt tgactttttg ctttttctt gcttgaaact
                                                                      600
getetgtttt ggtttttata gatttaatea acattgacaa agcaggatea atggaettee
                                                                      660
tttgtgattc cttttcaatc tcactctctt ttttctttat tgcctgaqta aqttcttqtt
                                                                      720
cttttcgttc tctttgccgg gccttctcct caaggatttt ttccatagct tttgttttct
                                                                      780
tgaaattggg atctgagggg tccaaattga acaagtggga agtgtacatt gcctgaaacc
                                                                      840
gtgcatcgtt aacatttacc tcaaagtcat cctctattaa ttccttcttt ttcatgagct
                                                                      900
getttttett etttttgete agattetggt getecacaat ettgttgtaa ttgaagtgtt
                                                                      960
tettactgte etegteetea tecateataa geaaageeat tteageettt tgtettteta
                                                                     1020
tttcaatttc ttcttctgga gatgtgccat cttttgcaga ttttaccgat tttttattta
                                                                     1080
tacctatttg tttaacttct tcagcaaagt atgggtcatt caaatcaaca tcagagggaa
                                                                     1140
gttcctcttc actggcctct tcagcaagag ccttctgttt ccttttcagt ctttttttct
                                                                     1200
etttettett etetaaaaat tetteeeaag gegteagttt ateeettteet teeeatttet
                                                                     1260
ttttgaccat ctcttctgca ctttctttaa gacctggaac ccatttaatt tccatttcca
                                                                     1320
tatcattttc tttgcctttt ttttttttt cttgaataac ctgcaagagc tgcctgtatt
                                                                     1380
tageaatttg ttetteatea teettetgae ttttetttgt tttteceatet tettetaeat
                                                                     1440-
tgactecate ateacettgt agetectett etgteteete tteatettea etagaggaag
                                                                     1500
ctaagtaggc ttgaaaatcc atgtccaaaa gctcttcctt tttaaacttc ctgttgagca
                                                                     1560
ttgtaattet tteatgatea gteteateee aagtgattte caeegttgat gtteecattg
                                                                     1620 :
cagcagaagt gaaatatttt ggtttatatg ctgttaaatt cacttctgag gctacatcct
taggeteate ateaaaagta atateatetg gtataaaeet tagatetatg aaagaacaae
                                                                     1740
tactttcaaa ttccaggcca tcacaatcct cataaatttt actagctgtt tccggagaat
                                                                     1800
cacagictac tactgcataa tagtactica gicgittgaa tigataatci cicaattiti.
                                                                     1860
ctctagacgt ccagtctttt tctggggcat cttcaggaat acttaatagc tctactggtc
                                                                     1920
cttgaacttg ctcttccttc atcctctcct ttccaaattc tgaaggatat atcttgacgg
                                                                     1980
aaaatattac acctcctttg ggtttaaatg aattgaacag agccagcaaa tcttttgcct
                                                                     2040
ttaatctatc ccagtccatg ttacaaactg ctaatcgacg tgtaatctca tcagcacgag
                                                                     2100
gagcatettt atetaattet etecaageat geteaaaace agattettet ggaaacaaat
                                                                     2160
ctgccgtatc atcttcatct tcagaactag tttctat
                                                                     2197
```

```
<211> 1520
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1) ... (648)
<223> similar to gi4589624 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

<210> 5382

```
<400> 5382
tttttcagta gggattctgg ccaagactcc agcaagcata ttgagctgat aaaagggtac
                                                                       60
cagaacaagt accccaaagc agaaatgacc ctgatcccaa tgaagggaga gttttccaga
                                                                      120
ggtcttggtc ttgaaatggc ttctgcccag tttgacaatg acactttgct gctattttgt
                                                                      180
gatgttgact tgatcttcag agaagatttt ctccaacgat gtagagacaa tacaattcag
                                                                      240
ggacaacagg tgtactatcc catcatcttt agccagtatg acccaaaggt aacaaacggg
                                                                      300
ggaaatcctc ccactgatga ttacttcata ttctcaaaaa agactggatt ttggagagac
                                                                      360
tatggatatg gcatcacctg tatttacaaa agtgatcttc taggtgcagg tggatttgat
                                                                      420
acctcaatac aaggctgggg actagaagat gtagatctct acaataaagt cattctatct
                                                                      480
ggettaagge catteagaag eeaagaagta ggagtggtge atatttteea teeagtteat
                                                                      540
tgtgatccta acttggaccc taagcagtat aagatgtgct taggatccaa ggcaagtact
                                                                      600
ttegeeteaa ceatgeaact ggetgaacte tggettgaaa aacatttagg tgteaggtae
                                                                      660
aatcgaactc tctcctgaca gtccaggcaa cacattttgc cttttttaaq qqqaqtttac
                                                                      720
ctcattgttg gttgttgtta tttttattgt attattgtta ttttattatt attattgtta
                                                                      780
taattttatt ttgttgtcct ggtcttaaac tactcttggt tgtcttccta agggtqtttg
                                                                      840
ttgacctcaa gcaagaagag tctgcagttc actgatgttt cagatttcta ctgaagtcaa
                                                                      900
tatgttatta cttttatata actttatttg agattgagtt aaatcatagc aatcaaatga
                                                                      960
cttttgaaac gcattcatca caagagacag cttagaagaa tgttctcttg gggcttaaag
                                                                     1020
atgeaatate gaettttatt tggtttetea aatteaatgt gatacaaata tttactggtg
                                                                     1080
aaaggtacca caaaagtgct ttatgcttcc tatggggaag ggactctgta acataaactt
                                                                     1140
gagttttgta atttatacaa ggacttaaat atataaacaa taattttett catetttaga
                                                                     1200
atttttäaag taaatgaata cctatgattg tatgtttatt ttttaaaaaa agttttaaaa
                                                                     1260
attgaggagt tttgttccac aagcaaccgg tactggctac cctggtctta tgacaattat
                                                                     1320
gageteetea caactgtetg etataaatge gaatgaactt tattttetea aggaaatatg
                                                                     1380
atttaattaa atattcatgt acattttaga agctttatga aacaatgtcc ttcatttgct
                                                                     1440
ggcaagaaga taaaatatga cagaacctgt ttatttaaaa taaaacacag gtatagcagt
                                                                     1500
attetttte aaaaacactg
                                                                     1520
```

```
<211> 2850
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2767)...(1222)
<223> similar to gi1825589 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 5383

```
<400> 5383
ttttttttta gacccgcagc ttttattagc catcgttaca gtctctcgtc cacaaacact
                                                                       60
gcccagctcc cttcccaggg cactttactg gaggcaagtg caaaacactg tggtgctttc
                                                                      120
tattcaaaga aacagaagat gtagctgtgg tggtaatgga cagcccagct acccaccagt
                                                                      180 ·
tttacagcag gatccgcagt gagcttgata cagatagagg atagatgacg gtaaaggggg
                                                                      240
aaaagagttt aaaattatcc aagtttccct cttgaaaggt cttttcccca aagcactgtg
                                                                      300
aagaggactg ctgcttaggc aattttctag ggacttaaac acaccgatgg gaatataaat
                                                                      360
atttcaaaca caacccctgt tacattctta cagctagttt catcacttag gtctcttctt
                                                                      420
agettaaatg atgeteettg aatetgtttg gteettggag gggeaateea tttttgtttt
                                                                      480
ctgtaatatt gacaatcacc ttctttaatg cagctataac atcaaagctc tgttaggtta
                                                                      540
cttaaccett cactettaaa etaaaagttt teattateat eteaegtgaa tecaatgtge
                                                                      600
```

```
aggttttqct tqcttattta aqaataaaac aaaacaaca taaagggttq aaaaacaaaa
                                                                      660
actictgettt ttttttette aagaggaaac tatgtaagaa tacataaaag geaaagttgg
                                                                      720 -
ctacttgaaa tocaagaatg gttttaatgt gttggccgag aaaaataaac tgtaaagttc
                                                                      780
tgtgaggtct tctaaaaatt tacaagaaaa actgatgggc agttctaatc agacttggat
                                                                      840
gttatctttt cccccctttt taaaaatgac aacagataca gttccacaaa atacaataga
                                                                      900
aactgttttt ttatcttgac tgccagagac gctcctttgc aatgccttcc ggtaaccaaa
                                                                      960
tttttgggca caacacacag ctggccttca tttcttcagg ggctggtaaa cagaggcatt
                                                                     1020
ggggtcaagt ccagaggggc tggtctccac aaatttggga agtagtagtg ggggggaaaa
                                                                     1080
caggggctca gggggctggg tggcgggcac tgtatgttat ggctgggcat gacggcccat
                                                                     1140
gaettegget atettetett ttäggteett gattteetea tetttetgaa ggatttete
                                                                     1200
ttgggcaatc tcgagetgcc gctttgcatc gcccagtgcg gagaacaggt ccagcttgat
                                                                     1260
tetegtetet geaettaage tgtteteeag gtgetgtgtt ttgtettgea tggetgagag
                                                                     1320
ggctgacatt aacacctcag tgtccttctc attttcctta tatttccgaa gctcctggac
                                                                     1380
ttttagttet agttetetga tttggtette ttteacette atgtecateg tgagettett
                                                                     1440
gecetetget tetagttete tgateegatt eegtaaggtt teggtgeatt eteceetaga
                                                                     1500
tgcagcagca aacgcaacag cccgggcagc agtggcttct tctaacttct tcctcttttt
                                                                     1560
ctcttccatt aactgtttct ctacaaaact tcgggcttcc tgctcagctt ttagcttttt
                                                                     1620
ctccaactgg ctgatattct gcttgtcttt ttgcttcatt tgcacagcat tatgtaactt
                                                                     1680
gttctgcagc agctcgttct cctgccgaag ctggcccatt tctgagcgga tccctcgctc
                                                                     1740
ggtgctcgaa agggagctga tctgactgcg gagctcttgt tccacttgtc tgctggcttg
                                                                     1800
caggicagee titaactiti taatgicitig ticcageetg accagtigegt eiggitiget
                                                                     1860
tagetggtta ttaggaatac agtttteeat taagteettg tgtgtaettg ggetettget
                                                                     1920
agigcattic igctictict cattitiact agaigaggaa ggaaigcicc cattigigge
                                                                     1980
gctatgactt cgaggtgaag agttcacaac tccactggca tttttqtaat tttttqaqqa
                                                                     2040
agcagtgcat gagtcctctt tcaagagatt ttctgtactt cccacaagat cattatttaa
                                                                     2100
tettttaeta tigataiggi titteeatata eteaatetet igiatittag agietaeagg
                                                                     2160
ttgtagaata ttgttgttat ttattccaag gttgtgtttt ttggcatcct tgtccttttc
                                                                     2220
tttccctttt tctcggtatt ctatctctgg caaagttgtg gagagttttt tqttqqctqq
                                                                     2280
gataceteca ttgtggtgta taaggatega agaatecata teaggtaate etttggetge
                                                                     2340
tteeteggee tettittett gettetgtag catetgtige tetggaggga gagettgttg
                                                                     2400
aagaagttgc atgtaaaact cgttctcttt ttgtacttct ttttgcttcc ttaaccgcat
                                                                     2460
tttgtagett acgtaacttt tgaagecaaa ceecaaagtt accacagggt acccaataca
                                                                     2520
gtgagcagca aatggacgac aaaggtctac atgaaagttt ttgagatctt taaatctaat
                                                                     2580
ggctgcttca atataaacaa aaaggatcca gagagacact gtaggcaaac acactcccct
                                                                     2640
ttotgtgtgc catacgtact gaacccatac atatgtgcta gcaqcaaaaa aaaqccactq
                                                                     2700
tatggggatg aacagcaggc atattatatt tgacgtgaat gctacacaaa caaaaaatac
                                                                     2760
tgagaaggcc taaagggaaa aataaaacaa aataaaagat tcatcttaga accccacgcg
                                                                     2820
tccgcggacg cgtgggtcga accgggaagt
```

```
<210> 5384
<211> 663
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(433)
<223> similar to gi468032 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5384
ggggetgtea aggeegtage atggtgteee tggaagteea atgteeegge aacaggaggg
                                                                       60
ggcaccagtg atcgacacat tggcatctgg aacgtgtgct ctqqqqcctq tctqaqtgcc
                                                                      120
gtggatgccc tttcccaggt gtgctccacc ctctggtctc cccactacaa ggagctcatc
                                                                      180
traggeratg getttgcaca gaaccagetg gttatttgga agtacccaac catggccaag
                                                                      240
gtggctgaac tcaaaggtca cacatcccgg gtcctgactc tgaccatgag cccagatggg
                                                                      300
gccacagtgg catctgcagc agcagatgag accccgaggc tatggcactg ttttgagttg
                                                                      360
gaccetgtgt ggeggeggga gegggagaag geeagtgeag eeaaaageag etteateeae
                                                                      420
caaggcatcc gctgaagacc aacccctcgc ctcagttgtt ttttattttt ctaataaagt
                                                                      480
catgtctccc ttcaaaaaaa aaaaaacaaa actggggggg aattaccaaa ttggattcaa
                                                                      540
tcctggttta aaaaataggg ggcctttttc ctttaaaaaa aaaaaaaagg gggggccctt
                                                                      600
taaagggtac aaattttaaa accegggggg geggaggtta agttttttaa aggggeeeca
                                                                      660
                                                                      663
```

```
<210> 5385
<211> 692
<212> DNA
<213> Homo sapiens*

<220>
<221> misc_feature
<222> (542)...(462)
<223> similar to gi3152662 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5385
tetecectaa tacaactatg tittaaatge actgatgtea tgeaaatggg etgtgegeet
                                                                      60
gctgattaca attaaagtga tttaacaaaa aagagactca aaaggtctca cccaaccttt
                                                                      120
gaacacatgg gaagtttaat coctoctoct coctttttt ttttaaataa ttaagggaat
                                                                      180
gactagettg teatteetae cagaacaact ggtacetgta eteatttete taccatattg
                                                                      240
tttctcttta gcatagctac agacctcctc agggcatgct atcccatttt ctgaaagtca
                                                                      300
aataagacaa aatcaaacat ccaagtgaga gacacattag acagttetea tteeccagag
                                                                      360
catctccatg gcacagatgc atgaaaaaaa tgggaacaga ttcctcattt gcatagaagc
                                                                     420
taaatagcta tattaaatct tattttaaga gtttcctttt acctttgctt cgtaaccatt
                                                                      480
aacaacttct gctttatctg tcctccagcc ccagaatccg gatttagttc tgataaaaag
                                                                      540
tgaacaccac aaatttctac atgtacaata tgccattcag atttatatct gtagccttta
                                                                     600
tagttttttt ccccccagc ttaagttagt gaaggacact tggaaatcat ggtcctattg
                                                                      660
tccacaggag gcggttagca atgacagatg gc
                                                                     692
```

```
<210> 5386
<211> 4703
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
```

```
<400> 5386
ttttttttt ttgtacaaaa cctggaaata tttttacttt tttaaaactt tgatctaagt
                                                                       60
tgccttagac ctcatggact cgatacaaga gtaaatatga attgggaaat aaaaccactt
                                                                      120
                                                                      180
taatagccac gataaacttt gttagaaatg tacatgttgc caaaataata ataataaaat
taaaaaaaag agagagagag aacagcttga tgtccaggtt agattatata aatgttcaac
                                                                      240
aagggcaggg taaaggaaac tttaaaaaaca ccagttctga ataagcctgg ggccccgtga
                                                                      300
gactececet eteccaceca gtetegggee etagggactg egteceteca aacaggacaa
                                                                      360
gtgggagtgg ataaggcctc caccaagctg cctctcccag tggacaaaaa catccaggta
                                                                      420
atgggtatat aaacaaagct cataagaaat gtacaaatat aaaaagctac aaacattaat
                                                                      480
aaattacago atcacaaaac acggaaacac ttcacaaggt gctagtaaaa taactgtatc
                                                                      540
ecceaatece eteateatae aaggaaaaea aagagetggt attaaagttg aagatteate
                                                                      600
ttcaaaatgt gtctgaaata gatcttttgt gtactatttg cttctgtaaa gacagagtgt
                                                                      660
aaggctgcac agacatcact tgtttttcag gcaatacctt agttcttaaa agaaaaaaat
                                                                      720
aataataata aaaggaaagg agaaggaaaa agcatcagaa cccaactgtc catctgactc
                                                                      780
agcaaaaaac tegtataaat gttaatgaag aactetatag aaagaaatte etaaagatae
                                                                      840
ttttactctt ataaaaaaga agttatttaa aaagctattt acacgctaca ttctatgaaa
                                                                      900
aatatgette aggaaataca tetaaaatta aaatacagga ttgeetgaga aacaaateca
                                                                      960
geceeteegt gtegatggtg gacacaccat ccaggtacga eccatgcagg egacaccaca
                                                                     1020
egetgacaeg ggagaacaga gaagtgeega eegtaagtee tegggeegee tggeeaetgt
                                                                     1080
ecetgeeeet geeestgeee tgeeagteee agggeagggg tgeettgget gagaagtget
                                                                     1140
tctccagagt gtggccagca gggcaagacg gtccctgcca catggcttag cctgggcctc
                                                                     1200
ccagacccca agatgtggct gagcccttgc cctttcctgg ggaccccaca atggctcccc
                                                                     1260
tgcccgctaa cacaccaacc cagctgccag tettagetge cccccagaaa tgctcctggg
                                                                     1320
catteagget gaacacccae catcetgetg ceacetgeca accagaaage teggggeaga
                                                                     1380
cccttcctca cccgccgagc actgtctgga cttggctgag aatcactcag gaagagaagg
                                                                     1440
ggggacataa acatcccact tgctcctcct ctttctgtgt tctttgcctt tttttttaag
                                                                     1500
cccctggagg ctgccagct gtggccagct ctgactctgg ggctggtgag cattggctca
                                                                     1560
ctctgtcttc cttgaaggac tcatgctctc agcagagctg cagaggccct gcaatcacac
                                                                     1620
ccacgeteag ggggeetgaa ggetgteett aaagtggaat aageggteet caaaettgea
                                                                     1680
gggccgcttt tctgggacag atcactctta gcaacttgag aaaagacgtc cattttcaaa
                                                                     1740
ttgaggggcc acgctgggct cgctctgccg gctgaaggga cagacgcttg ttggggagat
                                                                     1800
ggcagccggg aagaggcaag gccctccctg gtgaggcagc tcggcaccct cctgggaggc
                                                                     1860
agatgttttc gcggggctcc gggggtcctg agcggagcag aaggatcctg gctttccaaa
                                                                     1920
tettaaagga gtagttteee gtteegatga attiteaaaa tttteecaag cetetgettg
                                                                     1980
geggtegeea tgeeettttt egtaegtttt eetttggeag eggtgttgtt gtttggagae
                                                                     2040
gatgcggagg gccgcctctg tgtgagaaag accccagggg ccatgggctg ggaggtgcgg
                                                                     2100
ccagcctggg ccccggtgaa ggtgccagcg gctgtgtact catggtccgc caggctgctg
                                                                     2160
ctatgcgact caggcgggg ctctggcgag ctgccctcct gcgaggcctg gctgctggcc
                                                                     2220
gtgctggtgg aggccggggt ggtggaggcc ggtgtggtgg aggcaggggt ggtagaggct
                                                                     2280
ggcgtggtgg aggtggaggt ggtacccgtg gaggcggagg cagaggtgga gatggaggg
                                                                     2340
gaggcagtgt taggagccgg cttccttttg gtgttcttct tcttcctgtt tttctgctcc
                                                                     2400
tectgetggg acagettgge tgeageaget gecageeeg teteaatgga ggecaetetg
                                                                     2460
gtcccctcac gcacaggcct gtcttgtctt ggcaccgatg gaccgaccct ggctgtgggg
                                                                     2520
ctgtacggag catcgtctga gcctttcctc ttctttgacc gggacttgaa gacggggtta
                                                                     2580
tettegteag actecagtga ggggtaaaca tagtetgagt cettgaagca ggcatecagg
                                                                     2640
tgatcctgct cttcctcgta gtcgtccagg tcgacactgt tcttggcagc cctcttcagc
                                                                     2700
agtogtttgc ctgcactctt gccactgcca cccccattct tccgggcacc atgggcagcc
                                                                     2760
agegagetee cettggeetg geeageteee caegtggtet geaggeagga gteggaggee
                                                                     2820
tgcaggttgg ccatggacag cattccctga atggcttcct gtgtgctggg ggaggccggg
                                                                     2880
ggctggctgc tggggttgta ctccagcgcg ccaacctcct cactggcctg cagcaggtcc
                                                                     2940
```

```
aagatgccag ctgccgagct cccactctcc ttcttgactc tggcattgcg gccgggcttg
                                                                     3000
gtgtctgtgt cgatgtgcag cgaaccetcg tccgaggagt catcactctg cttgtacget
                                                                     3060
geogagteca getttggett egtgacagge gtgggcagca cageettett atecaacaag
                                                                     3120
aaggacaagt cccttttcgg ggcgtttttc ttcctcctga tgggaaactc gtcgatcttg
                                                                     3180
ageteacegt cateegacae gtacteatae teateeegea egggettggg ettgteetee
                                                                     3240
ttgaagttet geaaggeece gaacacaca gggetegteg ggggeetgag ageettggag
                                                                     3300
ccgaggagtt tcttgttgga gaaagaaaaa gagaacttat tgtctttgtt tccagctaga
                                                                     3360
ggcgacttct ctagcttctg ctcctcttcc atcttcagta aggagtcagg tttgctgttc
                                                                     3420
ttgtacttcc acttggcctc tgacttgctc ttggtttgct ctcgaatttc cagcctctcc
                                                                     3480
acatcattct gcatgtgaac cacatctttg ttgggcacac tcaggacact ctttgtggcc
                                                                     3540
ttgecettet tgggeggete catettggte agtgeeteet tggtgtggge ttegageagg
                                                                     3600
tccaggttgg ggatggtggg tgaggctgac tcccgggact tcttcccttt cttcttgcct
                                                                     3660
ccatctttga gcttcagcgt tttggggggc cttgggggct tagggggctt cgggggcttg
                                                                     3720
gggattttgg atggcttggg catcttcaca gttttgggag tcttttttt ggacactttc
                                                                     3780
tccaggaggg attgaggcgg ggtggcctca atgggagacg ggggctcctc cttctcccgg
                                                                     3840
teccegteae acaceteate tgacgaggeg acagtattea ettecggteg gacggetttg
                                                                     3900
gaggeattet cactgageeg gatetetttg gecaggtett tgattagetg tgaaggtttg
                                                                     3960
aagtgeteeg ggagetegte eteatgetet gecaaageet gettettegt eeacgategg
                                                                     4020
aaagcaccat tgagaatttt agctccttgg actagatgag ggggcagctg cttcccagat
                                                                     4080
ttgtgagage ctttgaatge ctccagcagg tgetteecca tgtaccagca egeagtttea
                                                                     4140
aagttgggaa actgagtcag gctgcccagt ttcaacctcc tttccacttc atatgctctc
                                                                     4200
atctgcatct ccacactcag gctgtggagg aaatgtcccg cgaaggccag gcagtccaca
                                                                     4260
ggggtgagtg tggcgtagat ccagcctgag gggatgaaga gggtctggcc ctgcttgacg
                                                                     4320
atgcacttgt agcatttgtc gacctggtca gcaaagaaca tctcgctgtg gttagaggca
                                                                     4380
gaccgccage geteatacag ggagatgttg geegaggeeg geetgatgag atagaaggte
                                                                     4440
ttctccccct tgagcacgtg gtaccaggca gaggcgcccc cagagtcgat gtggaagtcg
                                                                     4500
gtgtaactgt ccttcacgca gattaggcag tacttggtca ctttgggctt ggccagcaat
                                                                     4560
gcatcatctg gccagtagtt ttctacccat gacagtttct ttacaatgtc aggtggctcc
                                                                     4620
acgaagetgg acattegggt gteagagaac tegaggttgg tgaegttgag gaecegettg
                                                                     4680
cggttggtgc tgtagtaata gtc
                                                                     4703
```

```
<210> 5387
<211> 803
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(491)
<223> similar to gi2808660 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5387
acctcatcct ttctgaggac caaagatgtg taaggcttgg agacagacgg cagcctgtac 60
ctgacaaccc ccagagattt gatttcgttg tcagcatcct aggctctgag tacttcacga 120
ctggctgcca ctactgggag gtgtatgtgg gagacaagac caaatggatt cttggagtat 180
gtagtgagtc agtgagcagg aaggggaagg ttactgcctc acctgccaat ggacactggc 240
ttctgcgaca gagtcgtggg aatgagtatg aagctctcac atccccgcag acctccttcc 300
gccttaaaga gcctccacgg tgtgtgggga ttttcctgga ctatgaagca ggagtcatct 360
ctttctacaa tgtgaccaac aggtcccaca tctttacttt cacccacaat ttctctggcc 420
```

```
cccttcgccc tttctttgaa ccttgccttc atgatggagg aaaaaacaca gcacctctag 480 tcatttgttc agaactacac aaatcagagg aatcaattgt ccccaggcca gaagggaaag 540 gccatgctaa tggagatgtg tccctcaagg tgaactcttc tttactaccc ccgaaggccc 600 cagagctgaa ggatataatc ctgtccttgc cccctgacct tggcccagcc cttcaggagc 660 tcaaggctcc ttctttttag ggatatgcca cattacctgc tcccatcacc atccagcca 720 gcaccctggg acttcagtcg cctggcccaa ccccatgatt atggaacgtc taatcaaatt 780 aacccaaatc cagaccctgt att
```

```
<210> 5388
<211> 1280
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(629)
<223> similar to gi5081459 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5388 cctatgagga aatgtcactt tatcatcagc cagcaaatag gaagagacct atcatcttga 60 ttggtccaca gaactgtggc cagaatgaat tgcgtcagag gctcatgaac aaagaaaagg 120 accgctttgc atctgcagtt cctcatacaa cccggagtag gcgagaccaa gaagtagccg 180 gtagagatta ccactttgtt tcgcggcaag cattcgaggc agacatagca gctggaaagt 240 tcattgagca tggtgaattt gagaagaatt tgtatggaac tagcatagat tctgtacggc 300 aagtgatcaa ctctggcaaa atatgtcttt taagtcttcg tacacagtca ttgaagactc 360 tccggaattc agatttgaaa ccatatatta tcttcattgc accccttca caagaaagac 420 ttcgggcatt attggccaaa gaaggcaaga atccaaagcc tgaagagttg agagaaatca 480 ttgagaagac aagagagatg gagcagaaca atggccacta ctttgatacg gcaattgtga 540 attecgatet tgataaagee tateaggaat tgettaggtt aattaacaaa ettgatactg 600 aacctcagtg ggtaccatcc acttggctga ggtgaaagaa acatccattc tgtggcatgt 660 tggacttgat ctggcaaaaa ctgccaatag gaggactgcc cgacactgca gcaagattga 720 ggataagatg gaaggcagca gtataagctg tagatctgtt cttagatctc ttgaattagt 780 gagacgacag ttcccttagg cagtttgtgc atggcatcct ttattctcta tacatqqctt 840 tageggttet tgcctcattt tgggatteta aatggaaget ttcaacagag cattccattt 900 tgtcctgtta aaaccttttg ttttcaccta aaccctttct gcttagttgt atctctgtga 960 aaaacttgta tacacaagcg tccatgtctc acacaaatat tgatgtgatt attcttaagt 1020 gttaaatcat taacacttaa atgacttcat tgggaatatt gagcagaggg actgtgcttc 1080 tatgcactgg gcaaggcagt atttgcttag gaaactaatt tagtcatcag agatactttc 1140 ctaaaaagga aaaataaaaa acaaaatggt gccactttgg gttgaagcta cttttgttag 1200 gettgaatte atttatatgt ettttgatte ttaaaaaaac aaaaaacatt eeattagaag 1260 caccagtttt tttggctcag 1280

<sup>&</sup>lt;210> 5389 <211> 543 <212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (544)...(46)

<223> similar to gi2772539 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5389
gctgcaaagt gaggaggccc ggggtctcca ttgtacatgg gtctatttga cagtgacctt
                                                                       60
actotggaaa taatgatatt cottcagtot gaggtaattg atgttgatga aaccggtggo
                                                                      120
ategattggc tcataattcc cctgcacgtt gacgctcacc agctcctcct tgtagagaga
                                                                      180
gagtagagac teetggetga ggatgtgcac etggeeettg aagatgggca eetgeaettt
                                                                      240
teetteeatt tgeteetggg aettggtgat geaatggtgg acagatttae aeteagggtt
                                                                      300
gattttgtgc acttcccgat ccatagtgaa gtcctcgatg tctaaatcag cctgttgaag
                                                                      360
gatggtgcct gctggggtct tgtagatacc tctggacttt attctaatga agcagttctc
                                                                      420
cataatgtca atacagecca tgeegtgett geeegtgaet tegtteaggt acaegaagag
                                                                      480
ctccaaggag gtctggtgag gtggtgccat cttgatggtc actttcacgg ggaccccttt
                                                                      540
ttt
                                                                      543
```

```
<210> 5390
<211> 388
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)...(339)
<223> similar to gi5360111 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5390

ctgggagaga taggaagacg tggatcaaaa tgctcatgat ttggaggcca aagtggcgag 60

cctgagagga atggagttac aggggtgcgc caccactcag gttgaattac aagataaccg 120

agaagaacag aaacaggtgc gcttaccaca aagccgcctg acaccatggg aggtgcggtt 180

tattggcaaa gaaaagaac aacgtgaccg ggtgcgactg agagctctac aggaattaag 240

tcgaccacta caaaaacgaa ctgaaatgga agaatgtgaa aaaagaaaga taattgctga 300

agaaaagcac aaggaatggc ttcagaacaa gattgagtcc aaaagaatag aaaggaact 360

ggaaagttat atagaaatgg gggtacaa
```

```
<210> 5391
<211> 1222
<212> DNA
```

```
<223> similar to gi415907 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5391
ttgctttgtc atctgaacca caaactgtac ttcttttgcc tccctatgaa aatggcttct
                                                                       60
gccagtagca ttttctccag tcatccacag gtgaagacaa ggaaattctc tatcctgagg
                                                                      120
cccccttttc cacataatcc caccccaatg caaactattt cctgcaaaca gataccttca
                                                                      180
gactgtttcc cccttcatca taacgacccc agacctagaa atcccagttt aggcctcagt
                                                                      240
tgaaacattc ctcctaccta taaaaactac ccgtatgggc ctcatttcct catcccacta
                                                                      300
ggggtctgcc cttcctaaat caaaagcaag tagaagacag agtaaaatgt gtaatataaa
                                                                      360
tttattctgg gacattttcc tcattgaaga tattttaaca tagattaaaa tacatcaata
                                                                      420
tttcatgaaa aataaattct agaagaattt aaataatatc tgtaatgtac atgatttgac
                                                                      480
cctgaatatc ctttttttt tcacttcaaa catcattttt taaaaagtaa cataaaatga
                                                                      540
taaggactge aacattette atatatettg tgteteataa attttaatte aactgeeegt
                                                                      600
tettttetea aetatgtatg ttaatggtat ttgeteetgt ttttgaatag gaagagtate
                                                                      660
cattttctgt ttcttcgtga tatttaggtc ttctttctct gattcttcaa gaaaatgctt
                                                                      720
cgtgctgagt ttgaatagta atcgagggtc tggattagac aqtqqtqqac aattacacat
                                                                      780
ctctctaatt ttgagagcct gaggtataag tctatccaag tactcaactc gattgccatg
                                                                      840
agaagggtgt gtagataacc attctggcat cttgggttgg ccatgcaggc tatcaacgaa
                                                                      900
ctccatttgc tgccaaaaca ctgaactggc tcttatgtct gcacaagcct ttgcagcaag
                                                                      960
cagtagteca attitigteag etteggeete caattitetig etgtatggte tattaaacat
                                                                     1020
atactectge aatttägaet gtatecactg geacaaaagt geeaagetat etegaggaea
                                                                     1080
aatggcccaa atcattgtga ggaaaatcat acctaggaaa tccaacaaat gaaccatgcc
                                                                     1140
agcettteet tetgggeeat gaaatageae atgeagtaet tgggeatget geagaaggaa
                                                                     1200
agaaagttga tgaatatcgg tt
                                                                     1222
     <210> 5392
     <211> 2038
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (20)...(1179)
     <223> similar to gi3882333 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5392
gggccgacca gcccggtgga attcctctgt caaagccaag cttacagtaa atatgcttcc
                                                                       60
ctcattcacc aagaccccca tggatctcac catccgaget ggggccatgg cacgettgga
                                                                      120
gtgtgctgct gtggggcacc cagccccca gatagcctgg cagaaggatg ggggcacaga
                                                                      180
cttcccagct gcacgggaga gacgcatgca tgtgatgccc gaggatgacg tgttctttat
                                                                      240
```

<213> Homo sapiens

<221> misc\_feature <222> (1047)...(755)

<220>

```
cgtggatgtg aagatagagg acattggggt atacagctgc acagctcaga acagtgcagg
                                                                      300
aagtatttca gcaaatgcaa ctctgaCtgt cctagaaaca ccatcatttt tgcggccact
                                                                      360
gttggaccga actgtaacca agggagaaac agccgtccta cagtgcattg ctggaggaag
                                                                      420
ccctcccct aaactgaact qqaccaaaga tgatagccca ttgqtqqtaa ccqagaggca
                                                                      480
cttttttgca gcaggcaatc agcttctgat tattgtggac tcagatgtca gtgatgctgg
                                                                      540
gaaatacaca tgtgagatgt ctaacaccct tggcactgag agaggaaacg tgcgcctcag
                                                                      600
tgtgatcccc actccaacct gcgactcccc tcagatgaca gccccatcgt tagacgatga
                                                                      660
cggatgggcc actgtgggtg tcgtgatcat agccgtggtt tgctgtgtgg tgggcacgtc
                                                                      720
actcatgtgg gtggtcatca tataccacac aaggcggagg aatgaagatt gcagcattac
                                                                      780
                                                                      840
caacacagat gagaccaact tgccagcaga tattcctagt tatttgtcat ctcagggaac
                                                                      900
gttagetgae aggeaggatg ggtaegtgte tteagaaagt ggaageeaee aeeagtttgt
cacatettea ggtgetggat ttttettace acaacatgac agtagtggga cetgecatat
                                                                      960
tgacaatagc agtgaagctg atgtggaagc tgccacagat ctgttccttt qtccgttttt
                                                                     1020
gggatccaca ggccctatgt atttgaaggg aaatgtgtat ggctcagatc cttttgaaac
                                                                     1080
atatcataca ggttgcagtc ctgacccaag aacagtttta atggaccact atgagcccag
                                                                     1140
ttacataaag aaaaaggagt getacecatg tteteateet teagaagaat eetgegaaeg
                                                                     1200
gagetteagt aatatategt ggeetteaca tgtgaggaag etaettaaca etagttaete
                                                                     1260
tcacaatgaa ggacctggaa tgaaaaatct gtgtctaaac aagtcctctt tagattttag
                                                                     1320
tgcaaatcca gagccagcgt cggttgcctc gagtaattct ttcatgggta cctttggaaa
                                                                     1380
ageteteagg agaceteace tagatgeeta tteaagettt ggacageeat cagattgtea
                                                                     1440
gccaagagcc ttttatttga aagctcattc ttccccagac ttggactctg ggtcagagga
                                                                     1500
agatgggaaa gaaaggacag attiticagga agaaaatcac attigtacci itaaacagac
                                                                     1560
tttagaaaac tacaggactc caaattttca gtcttatgac ttggacacat agactgaatg
                                                                     1620
agaccaaagg aaaagcttaa catactacct caagtgaact tttatttaaa agagagagaa
                                                                     1680
tcttatgttt tttaaatgga gttatgaatt ttaaaaggat aaaaatgctt tatttataca
                                                                     1740
gatgaaccaa aattacaaaa agttatgaaa atttttatac tgggaatgat gctcatataa
                                                                     1800.
gaataccttt ttaaactatt ttttaacttt gttttatgca aaaaagtatc ttacgtaaat
                                                                     1860 t
taatgatata aatcatgatt attttatgta tttttataat gccagatttc tttttatgga
                                                                     1920
aaatgagtta ctaaagcatt ttaaataata cetgeettgt accatttttt aaatagaagt
                                                                     1980
tacttcatta tattttgcac attatattta ataaaatgtg tcaatttgaa aaaaaaaa
                                                                     2038
```

```
<210> 5393
<211> 998
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (914)...(168)
<223> similar to gill09828 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5393
tattattagg tcagaacgaa tgaagtagca gcaaaagggt ctctcctatg atctgtctt 60
cactggtcct cagggcaagg aggaaacttg ggcaggagat gattgctcaa tcccagcaga 120
ctctcagaat ctcacttgga cccgaaagtg catctgcttg gtggcattgt tcttcattcc 180
tgtcttcagc atccattttg atttcatcct ttggacatac tgcatgtctc gctctcgcat 240
aagagccgct cctgtgctgc cagtccatcc cagggctctg tactgctgaa gtactcggcc 300
cacggccttc cgatttttgg caactgccac agctcttgac aagccaaatc gctgtttgta 360
gtatctcatc aaggagcgat gacccactct ggcaccagaa ggcagaatca attccatggt 420
```

```
ttcatcatca tattccaagt tettttetga gggcaactee teageettat tggggteete
                                                                      480
cccttccttg tgatctggat agctactcct aaaatcatag aagtctgcaa attccaaagc
                                                                      540
agcatcgcca tctgtgaaga gcttacagtg gcttttgtca ttcatatgtg cctgtacagc
                                                                      600
ttctgtggag tagaaggact tccctttctc gttgcaccac aagcaaatct tgccaacacc
                                                                      660
aactttctct cccaagtatt taatcagtcc cttaatatct gaaagatatt ctatatcagg
                                                                      720
aataaagaaa ctgtggtctt tggtcatgtg agccacattc ttcatcagcg agctggaatg
                                                                      780
atgggaacaa aataagcagt ccgtgatagg gatggcacca aggggtgggc cttcctcagc
                                                                      840
etetteetee tetgeateet geteeaceae ategteeatt getteagtat eeteacatte
                                                                      900
caattettea teagaateaa tatetteeca ategteteea teeaggteet etteeteete
                                                                      960
ctcgctgtcc tcctcctgct gctttgccaa cttcttcg
                                                                      998
```

<400> 5394 gggaaaggtc caactggccc accttcaaca ctccctctaa gcacccagac ctctagtggc 60 agetecacee tatecaagaa gaggeeteet eecceaceae eeggacacaa gagaaceeta 120 teegaceete ceageceact aceteatggg ceeceaaaca aaggegeagt teettggggt 180 aacgatgggg gtccatcctc ttcaagtaag actacaaaca agtttgaggg actatcccag 240 cagtcgagca ccagttctgc aaagactgcc cttggcccaa gagttcttcc taaactacct 300 cagaaagtgg cactaaggaa aacagatcat ctctccctag acaaagccac catcccgccc 360 gaaatettte agaaateate acagttggea gagttgeeac aaaageeace acetggagae 420 etgececcaa ageceacaga actggeecee aageeecaaa ttggagattt geegeetaag 480 ccaggagaac tgcccccaa accacagctg ggggacctgc cacccaaacc ccaactctca 540 gacttacete ecaaaceaca gatgaaggae etgeceecca aaceacaget gggagaeetg 600 ctagcaaaat cccagactgg agatgtctca cccaaggctc agcaaccctc tgaggtcaca 660 ctgaagtcac acceattgga tctatcccca aatgtgcagt ccaqagacgc catccaaaaq 720 caagcatctg aagactccaa cgacctcacg cctactctgc cagagacgcc cgtaccactg 780 cccagaaaaa tcaatacggg gaaaaataaa gtgaggcgag tgaagaccat ttatgactgc 840 caggcagaca acgatgacga gctcacattc atcgagggag aagtgattat cgtcacaggg 900 gaagaggacc aggagtggtg gattggccac atcgaaggac agcctgaaag gaaggggtc 960 tttccagtgt cctttgttca tatcctgtct gactagcaaa acgcagaacc ttaagattgt 1020 ccacateett catgeaagae tgetgeette atgtaaceet gggeacagtg tgtatatage 1080 tgctgttaca gagtaagaaa ctcatggaag ggccacctca ggagggggat ataatgtgtg 1140 ttgtaaatat cetgtggttt tetgeettea eeagtätgag ggtageeteg gaeeeggege 1200 gccttactgg tttgccaaag ccatccttgg catctagcac ttacatctct ctatgctgtt 1260 ctacaagcaa acaaacaaaa ataggagtat aggaactgct ggctttgcaa atagaagtgg 1320 tetecageaa eegitgaaag geatagaatt gaetetgite etaacaatge äģtattetea 1380 attgtgttac tgaaaatgca acattagcaa agaggtgggt tctgttttcc aggtgaaact 1440 tttageteca tgacagacca geetgtagtt atetgtgtac acagtttaca getacaaaaa 1500 cctactttgg tatttattac agaaaagtgc tcagttaaat gtaagtgtta ttccttcagc 1560 aaaatattca ctgacccaaa actctttatg gcattttaca atgcacacag cctcatgcaa 1620

```
gtttagacaa gtggatttat actgtcttat gagtgcccgc ccctgatata ttacctcatt
                                                                     1680
atgcaaaaat aacatatctt tcatgactat tttgacaaaa gtttaaaaaca catatgaagt
                                                                     1740
tcaaatttca ggaaccaagg actgccagaa aatattagcc tctacattac gcatgcattt
                                                                     1800
aqaaqcttac ctgaaatctq ccttttataa aggaatagta tggataagtg gaattgtaca
                                                                     1860
ttttttaaac ttgattgcca ttaaagcaga aattataagg ttgcaacaat atttgtttct
                                                                     1920
aatcactggc tttctcaaga gtatggattg acatattgtg ttatgaatgc acatctctca
                                                                     1980
gatgtgttga agcatccatt gcatccattt tttattattt tcttagtttt gttcttggac
                                                                     2040
aaatttaaac ttttaaaaga ttattcaaga tgaatttaaa agtcaaccct tcacacagtt
                                                                     2100
tecetactgt atgtagaate caggtgetga aaccaagtgt ttetttteee atgetetttg
                                                                     2160
ttaaacccca attatagata atttttccag tcttaagctc tgtccacctt caagtcaatt
                                                                     2220
                                                                     2280
cataaccaag tttttgaacg ctgctatgaa ttgcactgtg aaaagcactc ttccctctca
gttttctttt catcccagcc atgtttatca gatccttaag aacattgtat ttcagtcttt
                                                                     2340
tacatcagtc tgaattttgg aaaagaatgc aatagttgta ctccacagtc agtggaactg
                                                                     2400
ttccctgagt ccgaggctca tgtgtcattc tggcactaca tttgcttaaa ttgctatttt
                                                                     2460
ggcaacagca cagaaaacta atatttttaa gcagagaatc ttggcaatga gtgagagatg
                                                                     2520
ttaatttcac agaagcacaa ctcccaaccc aacccttagg aaaagccctc ttccatcgtt
                                                                     2580
acagtgctca gtgaatatta atttagttct gcttaagtgg ttgctataca aactttgaat
                                                                     2640
agccacctaa taaataaacc ttgcatgaca aacctgcaaa atattttatc agctgttatt
                                                                     2700
ggaaagtgat tttaagcaat tgcttcctca gtgtcagggc acatgtgaat ttccacacca
                                                                     2760
aacagagcat gaggaaccag ttgacatgct gggttgtgac tggcagcttt agcagcctca
                                                                     2820
gtactgaage cacaccagtg teeggatgga agtetgeate tgaggttget cagtgteeeg
                                                                     2880
gtcattcatt tacacatttt aacttgcatt aaagagctgt tcttttctgt ggcctagact
                                                                     2940
cttttcactg atctcaaaat aaactggttt ttttcaaaaa aaaaa
                                                                     2985
```

```
<210> 5395
<211> 1268
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (725)...(492)
<223> similar to gi4589624 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5395
gccaggaaga gatacttaag agttgatata tacactaaga aagatgaaaa gatccagcca
                                                                       60
tacaactate taaggaaaga tattetett etatgggeae aagaagcaca caaaacaaca
                                                                      120
ggtctcagtg tattgtaaac accatcaaag acctccacac cattaggctt ataatctcac
                                                                      180
aagcattetg cetttgteag acaetteaca gggtgeaact gggttaettt tgeaggeaaa
                                                                      240
geggagattt tgatttetgt tgtaaaaage ceaacagaga gaaateggag gettteteat
                                                                      300
ctctgaccca tcagtccaat tcttttgtcg tcctttatgg aagtcttttc tctgttgcag
                                                                      360
ccactttcag taattgcaaa aggaaagaaa aagtgtctcc cacaatcctt ctctgggagt
                                                                      420
tcatgttttt ttgctacttg tcttctgttt ctgtttgcga aggtgagcct ctatctcgtg
                                                                      480
cetgaacace ageatgeeca getggeegtg ggatgeeteg tteatggeet tggaetgeat
                                                                      540
gcacatettg tactgetegg gggteagete gtecatgeag egetteteat gecagaggtg
                                                                      600
gaagagteet egeacaggeg teegtaceae tatgaggttg etgtggagat aettgegata
                                                                      660
aaggtgcaca teeteteege eecageettt gatgteeaga teaaaceeac etgtegggae
                                                                      720
agaacacact gttgaatcac actgcactga tctgttttgc ttccctgagt tgcaacaagc
                                                                      780
acaaactttt cattaagaca tgactggggg ggatgcgtgc ttcaccacca cccctccaag
                                                                      840
```

```
gtacqaqaqt qtccacctgg gtcaqaagcc ccgagaattc cccaacaaaq acgactttta
                                                                      900
tggcagacag caccgacttc ttcagatgac aggacctcca agaaaattcc aagcatttgc
                                                                      960
ctgcattcaa gagttatcag caatgctaat gaacagcccc agcctcgtgg ttaatgggta
                                                                     1020
caaaaataag atctagtatt cggtagcatt attactgaca gacttattgt gattatgaat
                                                                     1080
tagctattgt taacaattta ttgtatattt aaaaatagct agaagactga taaatatgat
                                                                     1140
aaataattga aatgatggat acctcccatg accctgatgt gatgattaca cattgtatgc
                                                                     1200
ctgtatcaaa acatcacatg taccccataa acatgcgcat aataattaaa aatagaggtt
                                                                     1260
tcqtaaaa
                                                                     1268
```

```
<210> 5396
<211> 1222
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1210)...(447)
<223> similar to gi3786433 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5396
ttttttttgg gagtactttc acgtttaata cgcaagggca taaaatagaa tgttaggaaa
                                                                       60
caatttggat ttttttccct aaaatatagg tgactatggg ctaqtttaca actttccttc
                                                                      120
tctcactgaa ataaaaatac atagttaagg attagggacg aatacataac aggtgacatt
                                                                      180
tgacagtttg ggcatattcc ttgttacttt ctaatcttga gaatcacagt ttgctgtttt
                                                                      240
aggaggtatc tgaggaggtt ccagataaaa ggcgatggcc taaatgctct taaactttga
                                                                      300
gegtgeetgg atgetetaaa gtaggagagg aatttataac agaagettac aatgaagaac
                                                                      360
cagacattcc gagccatctg agatcttgca atgagaaggc gccaggcgat aaggaagagg
                                                                      420
gcagtattaa agaggtagtg aatatttegg ageettttta agegttgett tgettttggg
                                                                      480
atcccagcca tatcctcttt caataagtat tttttaactc ccaaaacata attttcaatq
                                                                      540
tattccaacc agttcaactg gcgcacgtca aagttgaata ctctctggtc ttcaggactc
                                                                      600
ageteagaca teageattte tgtattgtae gtgeteeatt eccaaeteeg gttgatgaaa
                                                                      660
tactccaaca tggaaacagt tettaaaage egatteatga getttgteat cetgggette
                                                                      720
cttccagtga gccgcagata gcagtcatag ataatggcag gggcccggtg gctgaccgca
                                                                      780
ttccagtact gtgatgtgaa gctgttgctg gtaaaattag catttggcct cctgaaaggt
                                                                      840
ctctcaaatg ggattttttc aaaggttgcc aagacttgqa ctcccatttt qtqccaattq
                                                                      900
cagggattca tgttaccaga tgtaatgtgg tagactaatg ttgacttagg tctgtgaact
                                                                      960
gcagtatacc atoctacago tagcatgaga ttgacgactg tatcaactgg aattacgtot
                                                                     1020
gccacagcca ttggagtagc ttttatggcc cgaagaaacc ctttcccagt cgcaataatg
                                                                     1080
attecattag greeatttat attateaace caacetggga aaggeteetg ceaagttget
                                                                     1140
cccacaatgg agggcettat gatggcaatg ttcaggttcc tgctctcttg ctgcaccacc
                                                                     1200
atttctcccc atgtgccgaa tt
                                                                     1222
```

```
<210> 5397
<211> 399
<212> DNA
```

# <213> Homo sapiens

<220>

<221> misc\_feature

<222> (402)...(288)

<223> similar to gi4929667 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400>	5397					
ggaaactttt	tcagtattgc	tettetette	tctctcacat	tttccatgat	tgacatctgg	60
taaccacaga	ggtatcccga	gtgaaggtgg	ccctggcctg	cagcagctct	gctcttttt	120
ttcccctact	ttcctaaact	ttattaaaga	aaaaagcact	agaacatagt	cacttttctg	180
ggattcctcc	ccgcaaaatg	tgacgtttga	ttttcaaaca	tgccagaagt	ggacatggtt	240
cccagttgta	ctaaataggt	gagaagctga	agtcctaaag	tgttcatctt	ccaacttttc	300
ccagtctgtg	gtctgtcctt	ggatcagtaa	taattgtctg	aacagctact	atggcttcat	360
taatttttgg	ctggagctct	ctgagctctt	ctatatgcg			399

<210> 5398

<211> 2951

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)...(2954)

<223> similar to gi1510155 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

## <400> 5398 atctcactga ggaccaacct ttcgacattc ttcagaaatc cttgcaagag gccaatatca / 60 ctgaacagac attggcagaa gaggcatatt tggatgccag tataggttca agccaacagt 120 ttgcacaage teagetteat cettetteat eageateett taeteagget tetaatgttt 180 ctaattactc aggtcagacg ctgcagccta taggggtgac gcatgtgcct gttggagcat 240 cgtttgcaag caatacagtg ggtgtacaac atggctttat gcaacatqtq qqqatcaqtq 300 ttcccagcca gcatttgtct aatagcagtc agattagtgg ttctggtcaa atacagttaa 360 ttgggtcatt tggtaatcat ccttccatga tgactattaa taacctagat ggatctcaaa 420 tcatattaaa gggcagcggg cagcaagccc catcaaatgt gagtggaggg ctcctggttc 480 atagacagac tectaatgge aacteettgt ttgggaacte tagtteeagt ceagtageae 540 agcctgttac cgttccattt aacagcacaa attttcaaac atctttacct gtgcataaca 600 tcatcataca aaggggtctt gcaccaaatt caaataaagt cccaattaat atacagccaa 660 ageetateea gatgggteag caaaataeat acaatgtgaa caatttggga atteageage 720 accacgtaca acaagggate tettttgett etgeaagete acceeaggge teagtagttg 780 gtccacacat gtctgtgaac attgtaaacc aacagaacac aagaaagcca gtcacctcac 840 aggeagtgag cageactggg ggeagtattg ttatteatte ecceatggge caaceteaeg 900 caccccaaag tcagttcctt atacctacaa gcctttctgt cagttccaac tcggtacacc 960 acgtccagac tataaatggg caacttette aaactcaacc etetcagete atttetggee 1020 aagtggcctc agagcatgtc atgttgaaca gaaactcttc caacatgctc aggaccaacc 1080

```
1140
aaccatatac tggaccgatg cttaacaacc agaatactgc tgtccactta gtgtctgggc
agacatttgc tgcctctgga agtccagtga tagccaatca tgcctctcct cagcttgtgg
                                                                     1200
                                                                     1260
gtggacagat gcccttgcag caggcatece caactgtatt acacetgtca cetgggcaga
                                                                     1320
geagegitte ceaaggaaga cetggetteg ceaceatgee ateggigaea ageatgicag
gacctagtcg gttccctgct gtcagctcag ccagcactgc ccatcctagt cttgggtctg
                                                                     1380
cagttcagtc tggttcatca ggatcaaact ttacaggaga tcagctgacc cagccaaaca
                                                                     1440
ggactccagt accagtcagt gtgtctcatc gtcttccagt ttcttcttcc aagtctacca
                                                                     1500
gcaccttcag taacacacct ggaacaggaa cccagcaaca attcttctgc caggctcaga
                                                                     1560
aaaaatgtet gaateagaet teeeceattt etgeteecaa gaecacagae ggeetgagge
                                                                     1620
aagcacagat ccctgggctc ttgagcacca cactgccagg gcaggattct ggaagcaaag
                                                                     1680
ttatatccgc atccttagga accgcacaac cacagcagga aaaagtagtt ggatcatctc
                                                                     1740
etggecatee agetgtgeag gtggagagte attegggagg acaaaaaagg cetgetgega
                                                                     1800
                                                                     1860
aacagetaac gaaaggaget tteattetee ageagttgea gagggaceaa geeeacaetg
tgacaccaga caaaagtcac ttccgatcac taagtgatgc ggtacagaga ctgctctcct
                                                                     1920.
accacgtgtg ccagggctcc atgcccactg aagaagactt gagaaaagtg gacaatgaat
                                                                     1980
ttgagacagt tgccactcag ctcctaaaaa ggacccaagc tatgcttaac aaatacagat
                                                                     2040
qcctqctcct agaagatgcc atqcqaatca atccccctgc tgagatgqtg atgatcqata
                                                                     2100
ggatgttcaa ccaggaggaa agagcttccc tgtcccgaga caagcgtttg gcacttgtag
                                                                     2160
accetgaggg ttttcagget gatttctgtt gttccttcaa acttgataaa getgetcatg
                                                                     2220
agacacagtt tggccggagt gaccagcatg gcagtaaagc aagcagctct ctgcaaccgc
                                                                     2280
cagecaagge ccaaggeaga gacegageea aaaceggtgt gacggaacee atgaateatg
                                                                     2340
accagtttca totagtgcct aatcacatcg tggtctctgc agaaggaaac atttctaaaa
                                                                     2400
                                                                     2460
aaacagaatg cettggcaga gcactgaaat ttgacaaagt gggettagtg cagtaccaga
gcacgtctga agagaaggcc agccggagag agcctctgaa ggccagtcag tgctctcccg
                                                                     2520
gccctgaggg gcaccggaaa acctcatcca gatcggatca tggtactgag agcaaactgt
                                                                     2580
caagcateet ageagatteg caettggaga tgaegtgtaa caatteette caggacaaaa
                                                                     2640
gtetgaggaa ttetecaaag aatgaagttt tacacacaga catcatgaaa gggteaggeg
                                                                     2700
aaccccagcc agatctccag ctgacaaaga gcttggaaac cacatttaag aacatcttgg
                                                                     2760
aactcaaaaa ggcgggacgg cagccccaga gtgaccccac ggttagcggc tctgttgagt
                                                                     2820
tagatttece caacttttet cetatggett cacaggaaaa etgeetggaa aagtteatee
                                                                     2880
cggaccacag tgaaggtgtt gtagaaactg actccatttt agaagcagct gtaaatagta
                                                                     2940
tcctagagtg t
                                                                     2951
```

```
<210> 5399
<211> 1450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1232)...(793)

<223> similar to gi5737842 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5399
ttttttttaa agtgaaaaag aatttattta aggttttgtt atatcaggac aacaaaccag 60
cccttttatg tcaccactca tttaaaaggc cattccaaaa cattaccatt aatgtagtag 120
cccatgtttt ctttcaggca ttttcaaagg gcatctcaga cccacaatat tttctattga 180
gtgtgcagaa aaacagagct gcaaaatcat tagtaaggca aaataataaa atgtctccct 240
ttttattgaa acatcaattt tccatgtttt agagatattc tgaatttaac attcatagat 300
```

```
atgcaatatt taagttttag gatattagca tactatcagc aatattgggt ttaatagcta
                                                                      360
ctatcaagca actgatttct aatgcacaca acataatttg atagtatatg tataagaaga
                                                                      420
tggcctgaat tttgccctca aatgcacaaa aagaattttc catacacatt ctcaaaagtc
                                                                      480
tttggccttg ctgaataata atagagctgt tattttactg tgaagcaaaa taagccttca
                                                                      540
agtgtccctt acttgatctt agaaggtcaa attctctgtc caatagttcc tcttctgtta
                                                                      600
acttagagaa attatcctct ccaaaaggat tccaccctga catatcaggt ggattgctga
                                                                      660
tgttcttctg atttgtgaaa tttgcaatgg cctctttatc agcaactgac ctattggcac
                                                                      720
tataggagga gtccattatg gttccaacct gagctggaag tgatgaagtg taggaaacta
                                                                      780
aggetggtga gaactettga ggggaggtaa gatatteagg tgatgeetgt tgttgagaeg
                                                                      840
gctgatgttg agctagcatc tgctgttgaa agaaagcctg ctgatactgc ggcatcattg
                                                                      900
taggatactg tgatgcagaa ggttgtggtt gatataccga atgcattaaa aattgttgtt
                                                                      960
gaagcatctg ttgctgctgt gttgcatgtt gatactgctg catataagca tcttgaagta
                                                                     1020
ggtggtggtg gtggtggtgg tggtgctgct gctgctgctg ctgctgctgc tgttgctgtt
                                                                     1080
getgetgetg etgttgetgt tgetgetget getgetgetg etgetggtga ggatgaegat
                                                                     1140
gctgtaaatg gagttgctgt aatctccaat ctccctgctg tagttgctgg agtactctat
                                                                     1200
gctgctgtgg cggctgctga ggaggtccct gacccaataa aatttcaggg ccatttccag
                                                                     1260
gtcttagtgc cccttttggt ctatggttac cgaattcacc aggagcaagg actttaacag
                                                                     1320
gtgttgctga actttgaatg gtcagcacac tgggagtggc agtagtagca gagttggcct
                                                                     1380
ttggtctttg tcttggtgca attgaggtat atgttggtca aatggtatct gttattctgg
                                                                     1440
cttttatttg
                                                                     1450
```

```
<210> 5400
<211> 5931
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1155)
<223> similar to gil665787 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5400
ccaactectg gagtecectg ggagetgeeg etgeaggeec eegageeget aggeeeegee
                                                                   60
gccaggccac cgctgctgcg gcagccatgg cggaagttca tagacgtcag catgctcggg
                                                                  120
ttaaaggaga ageeeegeg aaateeteea caeteegaga tgaggaggag etggggatgg
                                                                  180
cgtcggccga aacgctgacc gtgtttctga agctgctggc cgccggcttt tacggcgtga
                                                                  240
gctccttcct gatcgtggtg gtgaataaga gcgtgctcac caattacaga tttccctcct
                                                                  300
cactatgtgt tggacttggc cagatggtgg ccacagtggc agttctctgg gtgggaaagg
                                                                  360
cgctcagagt agtcaagttt cctgaccttg acagaaatgt acctcgaaag acgtttccac
                                                                  420
tacctctact atattttggg aaccaaatca cgggactgtt cagcacaaag aaactgaact
                                                                  480
tgccaatgtt tacagttctg agaaggttct ccatcctgtt tacaatgttt gctqaaqqaq
                                                                  540
ttttactcaa gaagactttt tcttggggta ttaaaatgac tgtatttgca atgattattg
                                                                  600
gagectttgt agetgeeage tetgaettgg eatttgatet ggaaggatat gettttatte
                                                                  660
tgataaacga tgtcctaaca gcagcaaatg gtgcatacgt aaaacaaaaa ttagattcaa
                                                                  720
aagagctggg aaaatatgga ctgctctatt acaatgcact gttcatgatt ctgcccaccc
                                                                  780
840
acaccetett tettetgeag tteaccetet cetgtgtgat ggggtttate ttaatgtacq
                                                                  900
ccacagtact ctgcacgcag tataattctg ctcttacaac tacaatagtt ggctgtatta
                                                                  960
agaatatatt aataacttat attggaatgg tctttggtgg agattatatt ttcacgtgga
                                                                 1020
```

```
caaactteat tggtttaaat atcagcattg ctgggagcct ggtatatted tatatcactt
                                                                     1080
tcactgaaga gcagctgagc aaacagtcag aggctaataa caagctggac attaagggga
                                                                     1140
aaggagcagt gtgaccagag gattgcttca tctgatacgt aggcctaagt ttttaatcaa
                                                                     1200
ctcagaacac tggcagttcc tacagagaca ctgaggtgtc ttgattatgg aggaaataac
                                                                     1260
cattcctttg cacttgtaca atctgaggat tgattgctgc cttttaaaaat tttatgaaga
                                                                     1320
gagaaactta taattgactc tattttaaat atgttgtttg aattaattta tatcagactg
                                                                     1380
gaaaaggtac tgggcttttt aatttatttt tcttatatgc cgacagtgaa acatcagtgt
                                                                     1440
tttgaaagta ttttatttca taatttgata tccaggtgtc cctgagagct gcatatgtaa
                                                                     1500
tgtttgccaa ctggagette atcattcaaa ttgttgctge atctggagge agtttageet
                                                                     1560
ttcctctgct ggaaatgcag acgaatatgt gaaatttctc ttctttgaat cttatttctt
                                                                     1620
atgattgcat tgtcttcatc atatcatcat tccatttgcc aaggaaaaca actttggcac
                                                                     1680
tataaaaata tgtggggctt tgaagtgtat tgctatctat gttggcttcc ctgactttca
                                                                     1740
taggatgage agagtgcatt cettgaaaac atgttetttt tttgttgtgt agaatgggga
                                                                     1800
taatgaaggg ggtgagaaag taggcctttt actaattttt catctatttg acttattgat
                                                                     1860
tcaactaaaa tgttttaagt atatgtgcca ggcattgtgc taaatgctgg ggatacagag
                                                                     1920
atgtttgcag aggtagttga aacatctcac teetgecata gtgactcagg taaggttgag
                                                                     1980
aatttagctc tgttaatcta ttcagaagat gtcactaaga gtaagttgtt tcagcactca
                                                                     2040
aaageegeaa atetgtaaat tggattaaga acaeetgeee taeetaeeeg geaatagtgt
                                                                     2100
gaatccaaat gctgcaatgt gagatgaggt acaagtaaag agctgtgttt tgtaaaccag
                                                                     2160
tgcagctcag cattgactcc ctctctaagt gaaaattgca gacaggcaag tctgttttcc
                                                                     2220
cttgccacct tcctttgggt ttggttgctc tttggatgaa tatgatgagg gcccacattt
                                                                     2280
ctgaatttat tggtttgagg ggaaaggctg gttagacgtc tttgtattgt caatggttgg
                                                                    . 2340
tttttctctg gcagtgtcag tgttaaagct atcattttcc ttcttaaatg gcatgagcaa
                                                                     2400
tgagcaaact teecteettt caacattete acetacatea tgtgeeeett ggeteaceta
                                                                     2460
ctgagettge caacttetet caaaaccaat getgeatttt gggagageag etgtgaatgg
                                                                     2520
gcactgccta aattgcctct tggggtaatc tggagggtgg aggtgttaac tcaaacataa
                                                                     2580
ccctatgact tgactcagag atatccattg actttgagga ttagtgtgtt tgctcaggcc
                                                                     2640
                                                                     2700
agtigiacag ccagigigea agagatitigg taccititgea ctaatgeaca caccagigie
tatttcattg ggtttggaat ccactggact ctgttgacct aaacagttag gggttttgat
                                                                     2760
tttttttgat atgcaaattt atattgagat cattttcata ttcctgtctt ttggtttgtc
                                                                     2820
tttactaaag cttggctggt ggtgctgtgt ccctagaatt atccctgcaa ccaactccca
                                                                    ,2880
agttacaage tteattaaga geettagaet eacttttte tageatette tgaeetgaga
                                                                     2940
aaattccact gggagtaaag gatagtatct tgtgtcatat gggtcttact ctccctattt
                                                                     3000
taccaatgag aaaacaaaac tcagagaaag atgacttgct aatacatcaa acccatgtcc
                                                                     3060
tttttattga actatgctgc catttaatta accgcccttc ccctctgagg gagtaaggaa
                                                                     3120
acagatectg agtteacttg ageaetttea aaaaageaag cagttgattg aatttggtgt
                                                                     3180
cagagaggag catactttgc aaatcaggaa gagtgacagc ttaccctgtc ctggaaccct
                                                                     3240
tatcccgctt ccaggctgac tttagttgat aatgcacttc tggctgtaaa tgttgccaac
                                                                     3300
acttcctggt tttgcttagg tacagtgaaa gggcatagtg agagctattt ttagtgattc
                                                                     3360
tgttctttct gtcagcaaca tgaaggaggg acgtttgaat aatttttgtt gtagaatatt
                                                                     3420
tetteatgaa aggettttgg gtgtetttaa caggtgttgg getagageee caecaggagt
                                                                     3480
tgaactgcct cttgggggtc aggttcccta ggagatctgt cacctcttca ggagtatttg
                                                                     3540
agaacattgt gtagttacag cttcactaaa tgcacgtgac aggettetgt geettgggag
                                                                     3600
ccctggctta tgctgaaact tctggctgac cagagcagta cagcaacttt gccctgtctg
                                                                     3660
tgttctgctt cctggatgca tccttcagcc actaaccagc attgcaagat ggagcagggt
                                                                     3720
gaacaagctg gagactgaat agtcttttgg agtttgcgtt ttgattattg caggcgtgtt
                                                                     3780
acaatatact ggtgatttac ctggtactgt ggcacctccc agaaagtctg gtttttgccc
                                                                     3840
catgtttgat atttactagg cagaaattct ttgtcctgtt aactgcctcc tgggagaaaa
                                                                     3900
agaggcaata cagagttaaa teettaattt geecaetgag acagatgage tgtggtatte
                                                                     3960
caaaagacaa attetatgae tagtgtetee tgtteaatgt aagtgagaee etetttggee
                                                                     4020
aatotgotto tagtoaaggo taaatggatt ggaataacco tagttggoca ggotacacat
                                                                     4080
tgccagcatg tcccgttgag ttttaattgc ctcatgtggc tgtggacttt atgagtcaat
                                                                     4140
catttgtagg ctccagtttg cacctagttt tttttttta aaaagggcat ttacccctt
                                                                     4200
ttggtagccc tgttttatca agaatccatg gagggttttg gtcagtacag ctggtgcagg,
                                                                     4260
atcctcacgg agaaacagtg gagtttcaca ttgagttggt ttgaaatggc accccaggac
                                                                     4320
tttgggcctg ccttacttga tagcctcgtt cagtgagcaa agacttagtg agcagctctt
                                                                     4380
gtatgecaag tattttgeta agetetggaa aaaagataaa caagacatgg ttettgettt
                                                                     4440
```

```
caaggagtgt gtaattettt agecagatat ggaaacetgg accetgagtg ggagaaagga
                                                                  4500
gacagatgaa aggagtccgt gattttgtaa ccaagagctg cctgcatggt tatgagtatc
                                                                  4560
actgatttta gggacgcccc acagagctaa agcatttttt ttaatccgag aggacttttg
                                                                  4620
taactcatat tagttaatct tctagctctg agatagcaac acagctctta gaattctgta
                                                                  4680
agtagettga ggeeteetee tetaetgtae atgttettge ttteecaaaa ttgtaagttt
                                                                  4740
ggtttttcct atgaacaaga ctgtaattga tttttctctc cctgaggaaa aaagttcgga
                                                                  4800
ataaatgaga catggatatg aaactactta gcacaatgcc tggtacatat taggccctca
                                                                  4860
gcaaatgtgg ctaccgtgtc attatttcat ggtgagactc aaggcaaaac aagattctta
                                                                  4920
atttatgete egtaaatget agaggettgg geaataeggt etgteetgaa aaacaggaet
                                                                  4980
                                                                  5040
5100
ttaaaaatat ctgctggaca caattacggc cattacatga tgcaggtgat tctacctatt
ttttaaaaag aacaaaattt cttttatatt gtgacagtac attttaataa aggaaaatta
                                                                  5160
ttttcttccc cctactcccc ctcctttttt ttttctggta aagacagggt ctcactctgt
                                                                  5220
tgccagactg gtctcaaact cctggcctca agtaaccctt ctgtctcagc ctcccaaagt
                                                                  5280
gctgggatta caggtgtgtg ccacatgtcc ggccaggaaa attattttct atcttaaaga
                                                                  5340
aacatagtta cattttagaa tgtcaattca gttaaatctt tctcagtttt tacctttaga
                                                                  5400
tggctcctgg aaaggccagc gttccttttc ccctctctga attgaaagca cttgacccca
                                                                  5460
tgctgcccct gcttccaggc ctgtctcagt tgtcatatat tgtgagtccc tggcaccatt
                                                                  5520
actgttttct aagccagtct tctaggtctt actttcagga tgctgcttca tggcatgagg
                                                                  5580
atatagttta cagtgttgta gttttttttt ttttaaaget ttgttcttta aaaatacttt
                                                                  5640
ttaaaaaaaa atctactggt taaatttatt gtctcacaaa aatgttttta gaagattatt
                                                                  5700
tttttccaca aatgttttcc tttcctcatg ctgatgatca actgattttt gtcctacagg
                                                                  5760
tggttagctt ctcacgagta tttttttcat ttttagagtc tatttaccaa atgaccattt
                                                                  5820
ttagtgttaa aaggtactga ggaattgagg tatgtaaatc aggtgacata aacatgaaaa
                                                                  5880
ttatgtgcct aaatattttt gtaatggtgt aaaataaata ctttttcctg a
                                                                  5931
```

```
<210> 5401
<211> 1198
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (118)...(719)
<223> similar to gi3878412 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5401
gtcatttgca agggetttet egteetgtge tegtetettg atetgaetae eetggteeet
                                                                       60
gagegteaag tggaceaggg caggggtttt gagageatee tggatgteet etetgteatg
                                                                      120
tacatcaacg cccagctgcc tegggagcag eggcaceget ggcgcctgct cttttegtct
                                                                      180
gagetecatg gacacagett eteccagete tgtggedaca teactcaceg ggggedetgt
                                                                      240
gtggctgtcc tcgaggacca tgacaagcat gtgttcggtg ggtttgcctc ttgctcttgg
                                                                      300
gaggtgaagc ctcagtttca aggggacaat agatgcttcc tgttctccat ctgccccagc
                                                                      360
atggetgtgt acacacac gggetacaac gaccactaca tgtacttgaa ccatggacag
                                                                      420
cagacgatec egaacggaet gggtatgggg gggcagcaca attactttgg getttgggtg
                                                                      480
gatgttgatt ttgggaaagg acacagcaga gccaagccca cgtgcaccac gtacaacagc
                                                                      540
ccgcagctgt cggctcagga gaacttccag tttgataaga tggaggtgtg ggcggttgga
                                                                      600
gacccctcag aggagcagtt ggccaagggc aacaagagca tcctggatgc ggaccctgag
                                                                      660
geccaggece tgetggagat cagegggeat tegegecaea gegaaggget eegggaagte
                                                                      720
```

```
ccggacqatq aatqaqqaqc cgcctgagcc ttcctggagc caqqacctqq attcctctgg
                                                                      780
gtagagggca ccgcctgcag cccctcttcc ctcccacatg gtttaactgt aatagcgtac
                                                                      840
cgcacgggtc acagcctggt agtcccacat gtgccaagaa gacgccctct gaagccatgt
                                                                      900
cctgactcat gggtggatct cccagaaata gatgtttttt aagttttctt ttttgcccta
                                                                      960
cagggtcacc ctcaggatct ctccaagaaa tcttgtgtca aattagtaac tcagtcttat
                                                                     1020
actitigation tittitaccaa egaaateeta ageagetgag accitticaga eeeeegetgg
                                                                     1080
cattagggaa ttccgctggc attagggaat tccgctggca ttagcattgc tgggatctca
                                                                     1140
acttetetat tgaagaggg gtteeteeeg etggggttea tatggeetea eteaegee
                                                                     1198
```

```
<210> 5402
<211> 645
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (289)...(433)
<223> similar to gi4587207 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5402 gatcaaggaa ggactcaccg taatcacttg cttaaaaaqa acacttaagc aaqqactqaa 60 agggagtgaa gatgtgagac aaataggtat ctggaggagg agcgttccag ccaaggaaat 120 gcccagtgct ttggactcat ggcagaaatg tacttgagta ttctaggacc aactgggaag 180 cccatggaag ccagagtgga ggtcggggag ggagcaggag gacacagagc caaagccttt 240 ctgaaccaag agggacagga attgggtgac cgttaataac ttgtaatttt ctqcctccaq 300 gattcagagt ttggttggag aaatgtcttc ttgctttcag ctgctgttaa catatcgggc 360 ctggttttct acctcatctt tggccgagca gatgtgcagg actgggctaa agagcagaca 420 ttcacccacc tctgagcaaa ccgagagatg tqctaqatcc tqqtqcttaq ttcatcattq 480 ttttccctca cagacatttc tctttcatgc ctgcttgact gataagccat tagctagacc 540 ctgactatgt aacgctaaag attttaccat gcctggaaat tttacagggg aagaaaacac 600 gctagttatt taactgcaag ctactaaaag cataggtgtg ttgag 645

```
<210> 5403
<211> 745
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (273)...(349)
<223> similar to gi5102894 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5403
gtcactcttt ttgttctggc gtgtcatgtg gtactttagg tagcttcaca ttttatgttc
                                                                       60
tagttaagta aaattettag agaatgaggt actatetetg gatagtetgt ttgatettga
                                                                      120
aaatgtacag aattetttge etettgatee tggaggaeta gtgaetttee agetetgaga
                                                                      180
gagaacagga tecetetgee aattttttte tgtggtgtaa ggcagageet ggtcaeteea
                                                                      240
tetaatgetg tetateteat eteaegtata ggagegggat getgeaetee aaceetgggg
                                                                      300
actatgcctg gggtcagaca gggcttgatg ccattgtaac ccagggtgag gagctgcctt
                                                                      360
ttgagggtgt ctgttcagtg tgtctcatgg ttccacaggc ttcctgcttt ccttctgcta
                                                                      420
ctttctgaaa tggcagtcac tctgctttct ctaatatttt gagctttggg gtttccattt
                                                                      480
tactaaaggg atgaatgatt tatggggtta gctcagcatc catgcacttc ctaggtctga
                                                                      540
gggaatttct agaagatggt ttcacctcca taggaagaaa agacttctat aacaaatagt
                                                                      600
attttgtatt tttgtctctc ttgctcagtt ctataaggat tctattaaca aatatttcac
                                                                      660
aaaaaaagga gggtttcctc acatgttgaa gcagggattt ctgctagatg gagcaaagta
                                                                      720
ggggaaggaa gcagagaaaa aagta
                                                                      745
```

```
<210> 5404
<211> 3043
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(3045)
<223> similar to gi4589634 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5404 gaggaggage tggaggggge geggetteet eteggteget eeetggegee gggeetettt 60 etetgeetgg cecagggetg geggeeggeg ggggtegegg eggeggeagt gggggegetg 120 gegggeegeg ggtggegggg geegggeege ggeteegggt gttaggagae aagatggegg 180 eggeteteag aaggeeggte teeteetete egeegteete egeeeegeeg etegeegeet 240 ectecteteg ggtetectee tectegtttg etgeeteete etecteetge ageageacea 300 gegacegeeg aagegeegge tegeteacee ggageteegg aggtggatag aeggggeage 360 tgcaggetee ggcgaccgag gccgagetgg ggccggggeg gggacggegg cggcggegge 420 ggcgacggcg gcggcgccgg gtggggatgg ggtcgcagac gctgcagatc ctccgacagg 480 gggtgtgggc cgcgctcagc gggggctggt actacgaccc gcaccaggcc accttcgtga 540 acgcgctgca cetetacetg tggctettet getgggceta ceetteacec tetacatgge 600 ccttccttct accatgatta tagtagcagt ttattgtcct gtgatagctg ctgttttcat 660 tgttctgaag atggtcaact atcgactaca cagagcactt gatgctggag aagttgtaga 720 taggactgca aatgagttca cggatcagcg aaccaaagct gaacaaggca actgttcaac 780 caggagaaaa gacagcaatg gaccgagtga tcctggtgga gggattgaaa tgtctgagtt 840 cateegagag gecacaeeee cagttggttg cagtteeaga aattettatg eeggtetaga 900 tecaageaac cagattggat etggtteete gegtettgga acageageaa etattaaagg 960 agatacagac actgctaaga cttctgatga tatcagttta agtctgggcc aaagttctag 1020 totttgtaag gaaggaagtg aagaacaaga tttggcaget gateggaage tetttegtet 1080 tgtctccaat gactccttca tctctattca gccttcctta tcctcttgtg gacaggactt 1140 gccaagggac ttcagtgaca aagtgaacct gccaagtcat aaccaccacc accatgttga 1200 tragtetetg tragegreet gtgacacaga agtagettet ettgtacett tacactcaca 1260 ctettataga aaagaccace ggeegegagg tgtaccaegg aettetaget etgetgtge 1320

```
ttttccaqac acttcactga atgattttcc cctttatcag caaagacgtg gattagatcc
                                                                     1380
agttagtgag ttagaatett ccaageetet ttetggatee aaagaateet tggtggaaaa
                                                                     1440
ttctggttta tctggggaat ttcagcttgc tggtgacttg aaaatcaata cttctcagcc
                                                                     1500
                                                                     1560
acccacaaaa agtgggaaga gcaaaccttt gaaagcagag aaaagcatgg acagcttgag
gagcetgage acaeggagta gtgggteaac agaaagetae tgeagtggaa eggaeeggga
                                                                     1620
cactaacagt actgtcagca gctataaaag tgagcagacc agctcaactc acatagagag
                                                                     1680
catcctgtca gagcatgagg agtctcctaa agcaggaaca aaaagtggga ggaagaaaga
                                                                     1740
gtgctgtgca ggcccagagg agaagaatag ctgtgccagt gacaaaagga ctagcagtga
                                                                     1800
aaagattgct atggaagcga gtaccaacag tggggttcac gaggccaagg accccaccc
                                                                     1860
ctctgatgag atgcacaacc agagaggtct cagcacctct gcatctgaag aagccaataa
                                                                     1920
aaatccccat gcaaatgaat ttacttccca aggggacaga ccacctggga acactgcaga
                                                                     1980
aaacaaagaa gagaagagtg ataagtcagc tgtttctgtg gattccaaag tgcgtaaaga
                                                                     2040
tgttggtgga aagcaaaagg aaggggatgt tcgacctaaa tcttctagcg taatccatcg
                                                                     2100
gacagettet geccacaagt caggeaggag acgeacagga aaaaaaeggg ctageagttt
                                                                     2160
tgattcaagc cggcataggg actatgtttg ctttcgaggt gtttctggta ccaagccaca
                                                                     2220
cagtgctata ttttgtcatg acgaagactc tagtgatcag agtgacttga gtagagcatc
                                                                     2280
aagtgtteag tetgeteace agtteageag tgatagetet tetageacea etteteatte
                                                                     2340
ctgtcagtct cctgagggca gatacagtgc tctaaagacc aaacacactc ataaagaaag
                                                                     2400
gggcacagac tctgaacaca cacacaaagc tcatttggtt cctgaaggaa ccagcaaaaa
                                                                     2460
gegtgeaaca egaeggaett etageacaaa tagtgeeaag actegtgeee gagtgttgag
                                                                     2520
cetggacagt ggeacagtag catgtttgaa tgactcaaac aggttaatgg cacetgaaag
                                                                     2580
                                                                     2640
tataaagccc ttaaccactt caaaatcaga tettgaggcc aaagagggag aggtgetaga
tgagctatct ttattaggac gggcttccca gttagagaca gtcactcgat ctaggaatag
                                                                     2700
cttgccaaac caggttgcat ttcctgaagg ggaagagcaa gatgcagtca gtggagcagc
                                                                     2760
acaagccagc gaggaggcag tgtcatttcg ccgtgaacgc agcacattta ggcgccaggc
                                                                     2820
agtacggcgc cggcacaatg cagggagtaa ccctacccct cctacattqc tcatcqqatc
                                                                     2880
accectaage etteaagatg gteageaagg ceageagtee acageceagg teaaagteea
                                                                     2940
                                                                     3000
gtcccgcccc ccttcccagg ctgcagtgct cagtgctagt gcctccttgc tggtaagttc
tettetaege tgtatgagae tggtggetgt gatatgteae ttg
                                                                     3043
```

```
<210> 5405
<211> 769
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(464)
<223> similar to gi854737 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5405
accaaaagga atactcccat tgaagctctc tgtgagaact ttccagagga gatggcaacc
                                                                       60
taccttcgat atgtcaggcg actggacttc tttgaaaaac ctgattatga gtatttacgg
                                                                      120
accetettea cagacetett tgaaaagaaa ggetacaeet ttgaetatge etatgattgg
                                                                      180
gttgggagac ctattcctac tccagtaggg tcagttcacg tagattctgg tgcatctgca
                                                                      240
ataactcgag aaagccacac acatagggat cggccatcac aacagcagcc tcttcgaaat
                                                                      300
caggtggtta geteaaceaa tggagagetg aatgttgatg ateceaeggg ageceaetee
                                                                      360
aatgcaccaa tcacagctca tgccgaggtg gaggtagtgg aggaagctaa gtgctgctgt
                                                                      420
ttetttaaga ggaaaaggaa gaagaetget cagegeeaca agtgaeeeag tgeeteeeag
                                                                      480
```

```
gagtcctcag gccctgggga ctctgactca attgtacctg cagctcctgc catttctcat 540 tggaagggac tcctctttgg gggagggtgg atatccaaac taaaaagaag aaaacagatg 600 cccccagaag gggccagtgc gggcagccag ggcctagtgg gtcattggcc atctccgcct 660 gcctaaggct ctgagcaggt cccagagctg ctgttcctcc actgcttgcc catagggctg 720 cctggttgac tctcctccc attgtttaca gtgaaggtcg tcattcaca 769
```

```
<210> 5406
<211> 933
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(301)
<223> similar to gi4868443 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5406
accatcagca gtgacacgga cgaggaggag gaacagaaac acgcccccac cagcactgtc
                                                                       60
tecaageaaa gaaaaaaegt cateagetgt gteacagtee aegaeteeee etacteegae
                                                                      120
tectecagea acaccagece etacteegtg cageagegtg etgggcacaa caatgecaat
                                                                      180
gcctttgaca ccaaggggag cctggagaat cactgcacgg ggaacccccg aaccatcatc
                                                                      240
gtgccacccc tgaaaaccca ggccagcgaa gtattggtgg agtgtgatag cctggtgcca
                                                                      300
ggtaatttgg ggccaggaca gggcaggaac ctctccctgg agagtggttt tcctgctttt
                                                                      360
ctgctgctag aaatgttgct gtatgggagc tagtacaata gaaagtgccc agtgactgca
                                                                      420
ggcgaccctt accgaggatt ttattcaagt atccagggga ggcttctgct gaacagcaca
                                                                      480
ttgtataagc agcgttttcc ttctttaatc ctgtaatcaa tacctctctg cctttacaat
                                                                      540
ggctctgctt ccaactaggt tgattaatag aaaataaaag cctcctggtt ctttatgcct
                                                                      600
gagcctggaa gaatacctgg tctggggagt tcctggctga catctagcac cactctctgc
                                                                      660
caggaagece tggtggtcag atgggettet tgtgtaggaa gaaceteete cqagtettqe
                                                                      720
tagggaaggg tgaaattggc ccctctcagc ccctcctcgg aatcagctgc tgggcggcga
                                                                      780
gaccaagcca tgtgtgtttc tctgctcatg cactgctatc ttcagaggac tcctcctgtc
                                                                      840
ccgcgaaggc ttgtcttgaa aattgggccc tggaataaag gctgagaacg taaccttctg
                                                                      900
aataaactca gtggctcact gtaaaaaaaa aaa
                                                                      933
```

```
<210> 5407
<211> 312
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(236)
<223> similar to gi1787326 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
    <400> 5407
taccggtaag gactgcaacc cgcagcccgc taactgcctg aaagatcaat acgtcttacg 60
ccattgctgc gtggatgatc ggtcgggcaa aatgggttat tccgtaaaat ttcttgtttt 120
aacaaggatg gacacggaaa cggcctcatt attccactgc aagccttgtt atagcaagat 180
gacttttacc atttatcacc cgcttactca cagttttttc acttcttgct ggtgattggt 240
ttaataacca tcaataaagt gatcacgcag tgaagtaata aggtgcaaaa gtaaatataa 300
gcatagaaaa at 312
```

```
<210> 5408
<211> 788
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (738)...(133)
<223> similar to gi2293468 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5408 tttttttttt ttttaaaggt aagagcactt tattcttatt tgaaccacac tgtattgttg 60 attaccgagt gtgaaggtag tatgttcaga gtcttgtttt atgcctttgt agctgtgttg 120 ccagcatttg aaggtaactc ctccacataa gcggcaggaa aatggccttt tttcccattc 180 aaagateeaa accaccatee ttettetttt ttetegtgta taateacaat gteaccettt 240 tecaaattea acteateate ttgeetgget tgaaaagaat acaaggeett geaaagtetg 300 ctgctgagct gggctgcacc aggggctgga gttgaagaac ctggattgct ctgcccacca 360 gaagatgcct tgctcacaat attctctaat ctcttcatta aaaaaggccg agatattttc 420 acatagetat gagtatgete etttteeete eacetgaaga tggaattaet acaaggatgg 480 ctgggttgag gtctttgctc aagttctgct aacattgatg acagtttgta ggagttcgct 540 tccaaaaggt ctagtttcaa attgttctca tccattaacg ctgctgtgtc tttctggctc 600 tttgcatcag agaaggagga ggtgctggag tacgttttaa gcattcgttc caggccttcc 660 ttgtcttttg aggettttte aatgtetete tgeagtetea ataattttgg ttttagtaaa 720 gactitegte tetetitate cattgeactg traggatett etteaaagta atcegttaae 780 aggaactc 788

```
<210> 5409
<211> 415
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(416)
```

<223> n = a,t,c or g

<220>
<221> misc\_feature
<222> (2)...(180)
<223> similar to gil419564 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

<400> 5409
ctcagcttat gaaggcctca caagctctgg ctttaacaat ggcctgggct ccagctgtgg 60
ctttggcagg gcctctggct tcttcagctg taccagctcc tatagggcca tggttgtgag 120
gaagatcaag acctatgatg ggaagccaat gttcgagtcc tctgatgcac tgcccaagtg 180
aatggctgta gcagcccctc ccaacctccc cttcctgtgg ctgccccaga gcctgtgagg 240
gatgctgcag tacaggggag catagggaac aggagatcca tctgaggctc atccttaccc 300
ctcagcccac ccttgtngga aggttttatt tgcatggagt acccccantt tgcccattgc
ccccaacaaa tttatttgt atttttccc aaaattaaaa ggncttcagt ttagg 415

<210> 5410
<211> 957
<212> DNA
<213> Homo sapiens

<220>
<221> misc\_feature
<222> (958)...(448)

<223> similar to gi179475 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

<400> 5410 ttaagtaaca aatattgaaa aatttcattt gtacagttta tggttttaaa gaaaccatcc 60 tgaataaget caagttatag etaceagtta tgaatttata aagtttateg tgaeetttat 120 tataattaat atttgtatta atcatcacat attattatat ataagatata aatttaatat 180 aactatctgg taattatacc tatgtttact aacaatttta caactgctgg ctgcagcggt 240 cgcatcgaca ttcatttatt attacatttc ccattttqca aaatqtttaq aqqaacttcc 300 cttccaattt gtcaggtgtg accccatgac ttgcatgtct ctggggacac tctgggaaga 360 tgtcttcata gataagagct cagataaaca tgagacagaa cagtcccaaa atccctcagc 420 atgccccagc cctcagggga gttcctactt gtttatgaat ctgtccatat tataqctcqt 480 tgagtagaga aattccagga tcttcctgca tggatttctg atcagaagag tggtccagag 540 tgagetgtea taatacaett ettettggeg cagageteee eetttgatga tetecaggge 600 acattectee titggagetg citgeatatg gactateeca gaaactgeet teatggetgt 660 ttctgtgtct atgaggccaa gaacacagag agtgattgat acattgaccc tggacactga 720 atatteettt etgatggagg agaagaacce atccaaagca aacttgettg cagaatagge 780 agcaaccatt ggataagcca ctttcccagc cagagaggag acgacaacaa tgcttccatt 840 getetgette ageatgggea aggeagetae agteaggaee aegtaaetga ggaagttgae 900 ttccatgctt ttgcgcacat ggtgaatatc atcatgaaaa agattcaaag aagtqtt 957

```
<210> 5411
<211> 1316
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1317)...(22)
<223> similar to gi5924316 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5411
aaaaagacaa aagcaagtat ttatgaaagt ccatcagatt cctcagtaaa gctgaagtca
                                                                       60
cacactagag acaggtggtc tgaaggataa ttgaaggaag gtaacctgtt gggtccaatc
                                                                      120
tgttcttcag tgagcagatc gagagctgac cttacattta gagcatgttt agaataccag
                                                                      180
atgtaateca gggtgtgeet geacteeeet gaggteegga tetteeaggt agtgtatggg
                                                                      240
ggttctgact gcccatcagc actcagcagc ttgtaggcgc tgttcaggtt gaggctggag
                                                                      300
gaagcaaagt gtttgtagac ctcttctgtt ggctctgcat tgaagtcccc acacacaata
                                                                      360
aggggaatct tggctccttg ggtgatgttt tgcaggttct gaaggaggtc acagccttga
                                                                      420
getgategaa acegeteeca gecagtgegt gettttagat gggtaacage gatgeagaac
                                                                      480
tgtcggcctg actccttgca ctccagggtc tgtgcaatgg ccacctggtt ggttttcaat
                                                                      540
gicaiggotg teagectaat attggeactg tigaetaget tgaateggit tigaagaaaa
                                                                      600
aataaggcac aaccatctgg tccattgttg tgttctacat ctagacaagg tgaccagggt
                                                                      660
ttggggaaaa acgtgccttg atagcctagt ctactgagga gtggctggaa ggtgtcaaaa
                                                                      720
tagtggtcca cetettggag gcacaatata teaggetggt aggecaggat ttettecagg
                                                                      780
atgagacatt teetttette eeatttgagt getteaacag ggeactgtae aaagttgtet
                                                                      840
ttgccttctc caagagettg ggcgaggatg ttccattgca taaccetgat aggtgggtgg
                                                                      900
gtactagggc aatctgtcct cagatccaca aaatccctct ggaaccgggg aggtcgggtg
                                                                      960
tgcaggacgg ccctgcattc ctcaagaagc tctttaggat caatgggctc cagatgctct
                                                                     1020
gggtcaggtg acaccaaata ctctgggtgc tgggaggcag cgctgctgtt cagtgtcttg
                                                                     1080
gcgagaccac tatagagtct gcttgtaccg gttcccatgg aacacactgt tcgggaacac
                                                                     1140
gacctcgcgg cgcccgaggc cgccgaggcc gccgccagca gccgggggga tgcgggcctg
                                                                     1200
ggaacagcag ccggcggga caacgggcgg cgcagccctg gggcgggcag gcggcgcagg
                                                                     1260
ccgggcgcgc ccctctgcag cagggccgag cagagccgcc gcggactatg aaacat
                                                                     1316
```

```
<210> 5412
<211> 1382
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1231)...(296)
<223> similar to gi3882239 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5412
tttttttttt ttaaaaatca ctgtcaattt tactaggatt tagaatataa aacctttaca
                                                                       60
totottttac aataaagaga atttagagot cacttgtcag gaaaatattt ttcattatta
                                                                      120
aaaaaaattg ttataaagtt atttcttctg atatggagtt tcaaagcatc taacataacc
                                                                      180
gcttcagaat ctccacagtg caaaaataaa caacatgcat acacttaaga actttacatt
                                                                      240
ctttgaaaaa caatacaaat tggaaagaaa attagtatgt gatcaaagag agtcagagct
                                                                      300
caagtetgaa etttgecaat aaaggeagat gatetgaaga gttatttteg tttggaagte
                                                                      360
cattaacagt ccataagtct tgttctgtaa gaagtgacag tctagctaga agtttcaagc
                                                                      420
caccaaccaa agcaacttca gctcctgggt gcccagcaac atcttccttt tctgcagagt
                                                                      480
agaaaatata atccacagtt atggcacttc gggaatgaca ggtggtcact tctggaattc
                                                                      540
cagtgtcagg aaagtaatgt gaataaacag atgacaaact gaaatggtgc tgtaaatttg
                                                                      600
aagacaattt ttcagctgtc actaggacct ctgtttgctt cagctgtgtt tgtgtcagat
                                                                      660
cactgtctgt cttttctact tttggtacct gctgtacctc atacacacag ttctgtgaga >
                                                                      720
tacctaggtt tgggggccaa attggaatag ataaaattct ttgtccccgt gaagactgtt
                                                                      780
cctggccaga tacctttcct atggqaagtc cttcataatt caattttcct tcctttatqa
                                                                      840
aactatatag tggagaacca ggaacagaat taaagtcacc acacataaca atagggcaga
                                                                      900
agetgecate tttetggtgg geaacactgg aaatetetge cagtageatt gecaattgeg
                                                                      960
teagettaat ateacetege ettggattat acaacagatg egtatttget acgeagattg
                                                                     1020
cagggcaggc agcatatgga attttgggct gtaagagtaa aactaatcca acattgtctc
                                                                     1080
tgtccaacag agaaatatca gggcggaaga attccactgg gttcactgac aagagtgaaa
                                                                     1140
atttggaatg tttgaagcaa atagcacagc catcaggttt/cettcetgte egeatettat
                                                                     1200
attcacagtg ataacctaca agaaacaaat gaatttaaaa caaatgactg cttttatata
                                                                     1260
tttatcaaaa cacageteae gtgataette tgaacaatgt ttaccaaaet gtattetgea
                                                                     1320
aaacattagt aatgtaggat gtcaataaac attggaataa aaaacgtttg acactgggtc
                                                                     1380
                                                                     1382
```

```
<210> 5413
<211> 3450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3451)...(1345)
<223> similar to gi899298 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5413
cagggtggtg aactaaaaaa getggtteet gtgaacettg ggaaatggte teaceetet
                                                                       60
gagccctgga gatgacctga tggggcagct aggaggtcca aatggaagga ctgcaaataa
                                                                      120
aaggcactgg gaactctcag gggccacaca catgtgagat cttcccaata aaatcagcct
                                                                      180
tagetttaaa accaggaaat tgttageaac aggeteteac etteeteeaa cacceacage
                                                                      240
attgcctatc tccctgtgat agcttgattc taaagataac agcctgcctt tactcagaaa
                                                                      300
ccaggactgt gacgtgtttt gcacacattc tcttttcact ttcacagtgt gtgactatgg
                                                                      360
catgcaactt atgttctctg tgcctcagtt tactcaagtg ttaaacagga atactcacat
                                                                      420
gaggattaca tgagttaaaa tggataaaat ggataaaagt agagagtaaa ttatttaaac
                                                                      480
tttatcaaat cettggtaca tgacettaat acaattaagt atttgttaaa tacatacatt
                                                                      540
ttaaagaaac gtcatcatat ccacacacct atgaggcacc tgcccaggac cacagagcca
                                                                      600
```

```
atcaatcagg tgatgagtga ttccaggcca gcaggaaacc accgcccact gacacaggga
                                                                      660
ctgcaccatc catccttggt ttgcatggtg cctgccatgc ttcctgtatt actgttaaat
                                                                      720
acatggggca ggcctttgga ggatcccaat gttttaaaag ggcaatacga atatgattct
                                                                      780
aatacataaa aagtatgagg gcagcaagaa tttagttaca aaacccaaaa atcctcaaag
                                                                      840
agaagccaca tagcactgtg cagtgttacc actgcctcga gtctggacag ggcacaggtg
                                                                      900
accgagacaa gtcttattta actgatttca caagaagggt ccgagtttta ttagacaacc
                                                                      960
catgicaagg tacaaaatga ttaatgacaa tatcagccat attctattag ccaagtgcca
                                                                     1020
cctgtcacta tgaaactatc ctgtaggaca tccctgggct ctcagttgct aatgggctgc
                                                                     1080
tgaagaaatg aatgteetea aategagaee etaacacaaa gagatteeag agagtggett
                                                                     1140
agaaaaccca gctactctta ccaatgtggg gaaagggtca ggggaatgaa cctctgcagg
                                                                     1200
acaatttgaa ttcccaaact gagtaagagc gaaacaaata tgcaggcaag gcaaagcctc
                                                                     1260
aggggggctc ctgggtctgg ggcaggggt gggagacagg agaggcaaaa tggcagggac
                                                                     1320
ttgacagcag gttcctcttg tctacttctt cctcccgcct ctctccttga gggccaggtg
                                                                     1380
gatgactgcg ccattggcca tgttgtagta agccagtgag ttggaatctt tgatgaagat
                                                                     1440
acceteatae tgtagettet gttteeetge aggeatgeet gtggetteat gaatetteae
                                                                     1500
cttaatgaca gagacctggt ccgtgagtgg gagggtgaag accagcacct gcccattcag
                                                                     1560
tttccattcc gtcttatcct gcatgttggg cacctggact ttgatggaca ctggaccctt
                                                                     1620
gtttctgcgc aggaactcct cctctggcat gaggctgtcc tctgtcttca gttttttgga
                                                                     1680
ggtgggctca tcttccatgg gaggtggggg atgcacaggg ggcattgggg ctggagctgg
                                                                     1740
gacaggtgcc acaggtggag caggcacaaa ggctgttggc acaatcatgg ggggtgggcg
                                                                     1800
gggggccata ataggagggg ccgagggagg catgggcacc acgttgattc tgggcgcgtg
                                                                     1860
gatgatgggc ggcatggggg cgatcactga gcctgggggc agccggacca cagatgccat
                                                                     1920
tgggggccgg ggcatgacgg gtactgcgga gacaactgta gtacgaactg gaggtggcat
                                                                     1980
tgtgggtggt cggggcactg aagtgatggg tggagccgag ctgggggatgt tggtggctga
                                                                     2040
agatggtggc ggtggctgtt gagggatttc attgggcttg ctggggccaa tcttctcttt
                                                                     2100
agtgtcatcc tetggcacca ggcctttggc ettgtgaatg gcctcaatct gctcctqqaq
                                                                     2160
ggtgatgttg gcctgggcag cctgctgggt ccgggccatg ctgcctgagt ggccatccca
                                                                     2220
ggtcaccttt teetetgget tetggatete etecteaceg atettettae caatggetgt
                                                                     2280
ttcctctaca ccgaagatgt cagtacgccg ctcagccaac tgcttcaagc tgctctcaat
                                                                     2340
atccagacct ggtgcgtaca cctcatcatc gctctgcttc tcacggatgg agcgatcccg
                                                                     2400
ctgctccagc cagcgagggt caagaagtcc aatgcgcatg tgttcctgca ttttgctggc
                                                                     2460
ggggatette tecceagtaa tgggggaeae aagataetea tetggageag gggetggagg
                                                                     2520
caagggcttg gaggctttgg gatcataatc cttgcggaca atgacttggt ctgqaqttgq
                                                                     2580
gggcagaggt ggaggcatgg gtgtctctgg gggtgggggc actttctgcc cttcttcttc
                                                                     2640
atcatetgaa eeeteateea tatettgtae ttgggtgtee tggteeaget gggaaggagg
                                                                     2700
etecteegee tteteetgtt tgteatecte eteateagae tegaceteea teteaaette
                                                                     2760
ctcactctcc ccaaactttt catagcgctc ctgaatgagg attcgggccc ccagctcctc
                                                                     2820
tggcgtggtg gggggaggga agttcccttg ctcattgggt tggaagtcca ctgtttccac
                                                                     2880
caccacaaaa tcatgccagt cgatctgagc ataggccacc cgctccttct ccttctcctc
                                                                     2940
ttetteette tteeteteae gtteetggaa tttggeeeat teeaeteggt aacaceetg
                                                                     3000
atccaaaact tetegggggt tttcageete tttettgage tttgaaaata aacetttggg
                                                                     3060
tggaatcaag atcttggtgt actgttccac tagcttcgtg aagtagttga agaggctgtg
                                                                     3120
ctgtgggcgg agaaagtcaa actggtagtt gcgctgctct ttctgcatca gctgggtcag
                                                                     3180
aaactggcgc ccattcctgg ccacaaattg agccgtcagc ttcaccacat ccaagtcgaa
                                                                     3240
ggctgagata gagggaggat cagcaatgaa ctcaaactca ggaggaggct ctttgggcac
                                                                     3300
gatggtctct tggattactt gggcttggac cttctggggc agctgctgct gggtggtctg
                                                                     3360
ctgctgctgc tgcatgacct tggggatggc ggcggacggc tcctgagcct tcccttcctt
                                                                     3420
gaactcgctg accttgtggc ggtagtaggc
                                                                     3450
```

<sup>&</sup>lt;210> 5414

<sup>&</sup>lt;211> 1927

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
<221> misc_feature
<222> (6)...(1753)
<223> similar to gil230668 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5414
ggcacgaggt ggacatggcg tgcggctttc gccgcgctat tgcttgccag ctttccagag
                                                                       60
tgttgaatct tccaccagaa aacttgatca catcaatatc tgcagttcca atttcccaaa
                                                                      120
aagaagaagt agctgatttt cagctttctg tggattcttt attggaaaaa gacaatgacc
                                                                      180
attcaagacc agatattcaa gttcaagcca agagactagc agagaagcta agatgtgata
                                                                      240
cagtggtgag tgaaatcagt actggtcaaa ggactgtaaa tttcaaaata aacagagagc
                                                                      300
tottaacaaa gacagtgota caacaagtaa ttgaagatgg otcaaaatat gqattaaaaa
                                                                      360
gtgaactttt ctctggactt ccccagaaga agattgtggt tgaattcagt tcacctaatg
                                                                      420
ttgccaaaaa atttcatgtt ggacatttgc gttctaccat cataggaaat tttatagcaa
                                                                      480
atctcaaaga agctttagga catcaagtaa taagaataaa ttaccttggc gattggggca
                                                                      540
tgcagtttgg tcttctggga actggcttcc agctgtttgg ctatgaggaa aaactgcagt
                                                                      600
ccaatcctct acagcatctc tttgaagttt atgtacaagt taataaagaa gcagcagatg
                                                                      660
ataaaagtgt agcaaaagca gcacaggagt tettecaaeg attggaaetg ggegatgtge
                                                                      720
aagcactttc actgtggcaa aaatttcggg acttgagcat tgaagagtac attcgggttt
                                                                      780
acaagcgtct gggagtatat tttgatgaat attcaggaga atcattttat cgtgaaaaat
                                                                      840
ctcaagaggt cttaaagttg ctggagagta aaggactcct actgaaaaca ataaaaggaa
                                                                      900
cggctgtagt agatetetet gggaatggeg acceeteete aatttgtaet gtaatgegaa
                                                                      960
gtgatgggac ttctctctat gcaaccagag atcttgcagc tgctatagat cgaatggaca
                                                                     1020
agtataattt tgatacaatg atatatgtga cagataaagg acaaaaaaag cattttcagc
                                                                     1080
aagtatteea aatgetgaag ateatgggat atgaetggge agaaaggtge cágeaegtge
                                                                     1140
cctttggagt agtacaggga atgaagactc gaagaggaga tgtcactttc ctggaagatg
                                                                     1200
ttttaaatga gattcaatta aggatgctac agaacatggc ttcaattaag acaactaaag
                                                                     1260
aactcaagaa cccacaagag actgcagaga gggtcgggct cgcaqcactc attattcaqq
                                                                     1320
acttcaaagg tttactetta tetgaetaea agtteagetg ggategtgtt tteeagagte
                                                                     1380
geggggacae aggagtette etacagtaca cacaegeceg cetecacagt ttggaagaga
                                                                     1440
cttttggatg tgggtacctg aatgacttca acactgcttg tttacaagag ccacagtctg
                                                                     1500
tttcaattct tcagcatctt ctcaggttcg acgaggtgct ttataaatca tctcaggact
                                                                     1560
ttcaacccag gcatategte agttacette taactttaag teatettgea getgtggeae
                                                                     1620
acaaaacact acaaataaaa gatagteete etgaagtgge tggggeeaga etteatettt
                                                                     1680
tcaaagctgt ccgttctgtc ctagccaatg gaatgaaact tcttggaata acacctgtat
                                                                     1740
gtaggatgta atttccatta aaatggcttt taaaatgtca aaaaaaaaa aaaggggggg
                                                                     1800
cccttttaaa agaatcaaat tttactgccg ggggcgggga gagtaatatt ttttttatgg
                                                                     1860
ggccaccaaa ttaaaattgg ggggcgggtt taaaaacggc ggggagggaa aaacccctgg
                                                                     1920
                                                                     1927
```

```
<210> 5415
<211> 2725
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (3)...(109)
```

```
<400> 5415
tgaaatctct agaggaagaa cagagagccc gcaaagacct ggagaagctg gtgaggaaag
                                                                     60
teetgaagaa catgaatgat eetgeetggg atgagaccaa tetataaggg aegteeteag
                                                                     120
ttetttetgt tgaagaceag ttetgaggtg aagetgggea eeeetgacee aagteggggt
                                                                     180
gcactcagga ccacagggca gggctgggtg gggcgccacc ttgctctctg tatatagaaa
                                                                     240
agetggaget tattetgega atggagaega teaaaceatg aetgatgaat ceagaeagga
                                                                     300
gggattgact ctgaggacct gagctacatc aatccactct gtgaacatct cagttacctc
                                                                     360
420
atataaatat tatatataca tgtttcttgt aaatatccca ttttgaatgc atacctgtgg
                                                                     480
tggttctgtc cgggctaatc cccatgctag aatgtccttt ccagctacgt gaataagaag
                                                                     540
teccatgece geatecaceg gaageagaag cetggtggat geetggtteg tteegeagea
                                                                     600
ccagggcctc caccgtgctg tggcagcacc ccccatgtcg gtatttctaa ataaccttat
                                                                     660
ttatacctgc agagatacac ttcagtccca ttcagaagtc ttctcttaaa gcagcattac
                                                                     720
agtoccagac ctgcgggttt ctgagggcag cttgctggct gacagactca gtcttgacct
                                                                     780
caaggaagge ccatacggca ctgccgcatc cacctagagg tgtttgctct tgtccgctgt
                                                                     840
ctgagtactg tgattctcag atgagtttgc tgcgttttgg gaggacacag acggttctgt
                                                                    900
ataggetagt teagtaacaa caaaatacac tgttttgtet teeeteaaag agagatetta
                                                                     960
ctagaacctg taaatagaat gtattattta ttataagtca ctgcagctga tgaaaacaga
                                                                    1020
tggaggccat gctgcaggct gatactgatg ggtggagttt tgtcatcagg ccagcctcat
                                                                    1080
coogaggtot cotocaccat tggccgtago cagcaggott cagtqctcac cqaaaqtaaa
                                                                    1140
atcccctcct tcagcaagaa taaagcaata tacaccttag gttccactaa gtaacatagg
                                                                    1200
cataagcagg gaacgtttcc cccactgtgt tccagtgcag aggagacgaa gcctgtcctc
                                                                    1260
accgcggctc gctgggccca ggctggctct ggaaagcctg tgcggtcctg ggcaggaagc
                                                                    1320
ccggcccgtg gagcaggttt tcgttctgct tcagcaataa ataagggtga ccacagggac
                                                                    1380
tttgettttg gttteettte etgtgaaaag gttggtttta aagtgagata caetttteeg
                                                                    1440
tagaacaagt gttctatctt taaaaaccca aattgcagca ccgtggatta ctggtctcag
                                                                    1500
aacaactcat tgcgcatcag atttgactct ctgattttct gtctattqqc caaattqccc
                                                                    1560
tttaactgca cctgaatcct ttgtgtactg atgcctttga gctgggcacc ttgggagagt
                                                                    1620
gttgtgttgc tgtttacggt tcttccttgc ccttgctaat tacagtctct ggtgcccagc
                                                                    1680
aagccccttt ggcttccttc cgtgactggt cacgttgtct gcctgggctc agcgtggacc
                                                                    1740
tgecceatge tgeagaacet ggeeteacet ggaettttea etagaattge eagetteete
                                                                    1800
aacttagcag atcattcact catgcgggca caagcaaaga tcaacacttt cttttttggt
                                                                    1860
aagcttgagt tttacaagtt attttttggt gatgcgtaag acattgcagt gggaaaccat
                                                                    1920
tcaacttgag tttattggag tttgctgttg tagcaggttt taactcagga acaactcttg
                                                                    1980
tetgatetet eegeceetet geegggagge gacattaaet gteetetegg ageeggtage
                                                                    2040
gttgctgtcc gagtccccag gacggatctc ctgcagacct gccttaatgc tcagatcgaa
                                                                    2100
gtatttcaca agaatacttg tgtttttaac agcccttccc ctggacggtg cggccatgag
                                                                    2160
ggcctcatgt tacggcattg cettttettt etgtggatee agtatettee teggettttt
                                                                    2220
agggagcagg aaaaatgcgt ctgagagcaa ctctttttaa aaacctqccc tqttqtatat
                                                                    2280
aactgtgtct gtttcaccgt gtgacctccc aagggggtgg gaacttgata taaacgttta
                                                                    2340
aaggggccac gatttgcccg agggttactc ctttgctctc accttgtatg gatgaggaga
                                                                    2400
tgaagccatt tettateetg tagatgtgaa geaettteag tttteagega tgttggaatg
                                                                   2460
tagcatcaga agetegttee tteacactea gtggegtetg tgettgteea catgeactgg
                                                                    2520
gcgtctggga ccttgaatgc ctgccctggt tgtgtggact ccttaatgcc aatcatttct
                                                                   2580
tcacttctct gggacaccca gggcgcctgt tgacaagtgt ggagaaactc ctaatttaaa
                                                                    2640
tgtcacagac aatgtcctag tgttgactac tacaatgttg atgctacact gttgtaatta
                                                                    2700
ttaaactgat tatttttctt atgtc
                                                                   2725
```

```
<210> 5416
<211> 414
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (416)...(161)
<223> similar to gi2257540 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5416

cccacgcgtc cgggactatc tttgagttca tcttgttctg aatgtgagtc tgagtctttg 60

tttccagatg acacagtgct gtctgagtcc tctgaatcac ctgcctcaga actgcagcaa 120

agtttctgct gcccagaaac tgaatgggct gcttgtaatg cagattcttc ctcctggaca 180

agaagtgctg ctgcttctag ttcttccagt tctaacccca actgggcctt tgtaagggag 240

acttccttta aggcttctgc aagagctgcc aacgttttgg atttgacttt ctgagtccac 300

acacagtagt atgagatgta gagatcattc agtatgtatg cctgggtcgt ttcctgaaaa 360

attttgtgaa tatccaggag acactttaaa actgcacttt tacttaattg cagg 414

```
<210> 5417
<211> 896
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4) ... (435)
<223> similar to gi5262621 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5417 accgggtega cecaegegte egeagteteg ceggeeteeg tgeeggggea gegeegettg 60 gcatcacgta acggggacct gaatttacag gtggcgcccc cgccgcctag cgcccacccg 120 ggcatggace aagtgcacce ccaaaacatt ceggatteec ccatggccaa cageggacee 180 etetgetgea ceatttgeca egaacgtttg gaggataege atttegttea gtgeeettee 240 gtccccagcc acaaattttg cttcccttgc tctagagaga gtatcaaggc ccagggggcc 300 accggcgagg tgtattgccc cagcggagag aaatgccccc tagtcgggtc gaatgtacct 360 tgggccttca tgcagggcga aatcgcgact atcttagctg gggatgttaa agtgaaaaag 420 gagagagace ettgaaceae tgggeageea ceteetttge eetagaceág eteetetea 480 atcctgaggg cccctcccc aacccaactc gaccctccct cccctcaccc ccaaggtgta 540 gaattgtgaa tataacgaaa ctgcaaaaag ttagtcttat gtatagacat tattttcgtc 600 gtatgtttct atattttgaa acaaaggtat gtaacttctt catttgaagg ataagctggt 660 ttgtgttaag cagtatagta ttggttgggt catttgcatc atatcgttag catttatttg 720 gtggcagaat gtttgcctag gtacagaatt aatagccctt agcaacgact gctgctggtg 780 tgtatttttg taaatgttat gcactctctg aaaggaaaaa cacacacaaa agaaaaagac 840

```
<210> 5418
<211> 6398
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(2354)
<223> similar to gi5081652 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5418
agaccaacaa attcatcaag gagctcatca aggacgggaa gtcactcata agcgcgctca
                                                                       60
agaatttgtc ttcagcgaag cggaagtttg cagattcctt aaatgaattt aaatttcagt
                                                                     ..120
gcataggaga tgcagaaaca gatgatgaga tgtgtatagc aagatctttg caggagtttg
                                                                      180
ccactgtcct caggaatctt gaagatgaac ggatacggat gattgagaat gccagcgagg
                                                                      240
tgctcatcac tcccttggag aagtttcgaa aggaacagat cggggctgcc aaggaagcca
                                                                      300
aaaagaagta tgacaaagag acagaaaagt attgtggcat cttagaaaaa cacttgaatt
                                                                      360
tgtcttccaa aaagaaagaa tctcagcttc aggaggcaga cagccaagtg gacctggtcc
                                                                      420
ggcagcattt ctatgaagta tccctggaat atgtcttcaa ggtgcaggaa gtccaagaga
                                                                      480
gaaagatgtt tgagtttgtg gageetetge tggeetteet geaaggaete tteaetttet
                                                                      540
atcaccatgg ttacgaactg gccaaggatt tcggggactt caagacacag ttaaccatta
                                                                      600
gcatacagaa cacaagaaat cgctttgaag gcactagatc agaagtggaa tcactgatga
                                                                      660
aaaagatgaa ggagaateee ettgageaca agaceateag teeetacaee atggagggat
                                                                      720
acctctacgt gcaggagaaa cgtcactttg gaacttcttg ggtgaagcac tactgtacat
                                                                      780
atcaacggga ttccaaacaa atcaccatgg taccatttga ccaaaagtca ggaggaaaag
                                                                      840
ggggagaaga tgaatcagtt atcctcaaat cctgcacacg gcggaaaaca gactccattg
                                                                      900
agaagaggtt ttgctttgat gtggaagcag tagacaggcc aggggttatc accatgcaag
                                                                      960
ctttgtcgga agaggaccgg aggctctgga tggaagccat ggatggccgg gaacctgtct
                                                                     1020
acaactcgaa caaagacagc cagagtgaag ggactgcgca gttggacagc attggcttca
                                                                     1080
gcataatcag gaaatgcatc catgctgtgg aaaccagagg gatcaacgag caagggctgt
                                                                     1140
atcgaattgt gggggtcaac tccagagtgc agaagttgct gagtgtcctg atggaccca
                                                                     1200
agactgcttc tgagacagaa acagatatct gtgctgaatg ggagataaag accatcacta
                                                                     1260
gigetetgaa gacetaceta agaatgette caqqaecaet catqatqtac caqtiteaaa
                                                                     1320
gaagtttcat caaagcagca aaactggaga accaggagtc tcgggtctct gaaatccaca
                                                                     1380
geettgttea teggeteeca gagaaaaate ggeagatgtt acagetgete atgaaceaet
                                                                     1440
tggcaaatgt tgctaacaac cacaagcaga atttgatgac ggtggcaaac cttggtgtgg
                                                                     1500
tgtttggacc cactctgctg aggcctcagg aagaaacagt agcagccatc atggacatca
                                                                     1560
aatttcagaa cattgtcatt gagatcctaa tagaaaacca cgaaaagata tttaacaccq
                                                                     1620
tgcccgatat gcctctcacc aatgcccagc tgcacctgtc tcggaagaag agcagtgact
                                                                     1680
ccaagcccc gtcctgcagc gagaggcccc tgacgctctt ccacaccgtt cagtcaacag
                                                                     1740
agaaacagga acaaaggaac agcatcatca actccagttt ggaatctgtc tcatcaaatc
                                                                     1800
caaacagcat cottaattoo agcagcagot tacagcocaa catgaactoo agtgacccag
                                                                     1860
acctggctgt ggtcaaaccc acccggccca actcactccc cccgaatcca agcccaactt
                                                                     1920
cacccctctc gccatcttgg cccatgttct cggcgccatc cagccctatg cccacctcat
                                                                     1980
ccacgtccag cgactcatcc cccgtcaggt ctgttgcagg gtttgtttgg ttttctgttq
                                                                     2040
ctgccgttgt tctctcattg gctcggtcct ctcttcatgc agtgttcagc ctcctcgtca
                                                                     2100
actttgttcc ctgccatcca aacctgcact tgctttttga caggccagaa gaagcggtac
                                                                     2160
```

```
atgaagactc cagcacaccg ttccggaagg caaaagcctt gtatgcctgc aaagctgaac
                                                                     2220
atgactcaga actttcgttc acagcaggca cggtcttcga taatgttcac ccatctcagg
                                                                     2280
ageetggetg gttggagggg actetgaacg gaaagaetgg ceteateeet gagaattacg
                                                                     2340
tggagtteet ctaacegtgq geeceageag aactgetgag etttacatgg tatecatgae
                                                                     2400
aactgetgat tecagtgteg aggecattte tetttgecae tgagaaatge agegtgaetg
                                                                     2460
actotyttyc tacctytcaa catgaatytt totytyayct otyytytcac toatotocat
                                                                     2520
gatcatctca gccaacatgc atcagtactg caagaaaaga agtcaatcag cagaggagag
                                                                     2580
catttgataa ctaagaggaa gacttgcaaa gccgttttct catgagtacc ctgaataggg
                                                                     2640
ggcactcatt ttgtttcaac ggtccaaacg cccaaccttc agaaagagga agtcagatag
                                                                     2700
aaatagtccc tgagagcaca ctgtgtaggc taagcctgct ggggctgggt gaagaaattg
                                                                     2760
gcgctgagat ccaggctgga tccattgctt ttgtttacaa taggcactct ctctacccca
                                                                     2820
                                                                     2880
cctctcagta cttgagactt aaagtgctac aggcagctgg atctgtttgc atgcaggatg
                                                                     2940
aagagggtta aaacactgtt tatataagat ccaatctctc accatctcta aagcagccgt
                                                                     3000
tggcctgtca tcagtgagat acaatccagt cttctcatgc acgggaacac acacaccctg
cgtttctccc tcccaggcta ggaacctctc tgccaccaag ggctgccatc catcgcctag
                                                                     3060
taaccacggc aacccaacct actctaaaac caaaccaaaa aaataaaata acacatcctc
                                                                     3120
tttgcatgac acattttttt teteceettt ttggtacaet ttttttgaat ggttttetaa
                                                                     3180
caacttgaag cacaggatca aggaattagg gtggtctact tgaggcagat gggatagtag
                                                                     3240
ctgggaactg ttccctttct gattaatttc agcagcatcg gaatatattt ggagcacacc
                                                                     3300
ctagtaacct cttgagatta aattacatag tottaatatt totgttocto catgcaactg
                                                                     3360
atgittgitt titaaagggt aagatgctgc cicccaatgg gigatgccat cigactggit
                                                                     3420
tececatgic eleccatica eccatetety eleccaeeet tyeetyeete taacceaeca
                                                                     3480
etggccagcc ccettgccct actetgggct getgaacact ggtgctgtgg tggttttcaa
                                                                     3540
ggttaattcc taggctaacc gtatggccta tagtttaaaa gcacatctat gttcactgcc
                                                                     3600
actictgaaaa agggaattat ttctcagtict ttcaaggctt gagactaata taggccattg
                                                                     3660
tgattcagga aagaaacccc aaggttggag ggtgggatga gtacccctcc tgaaaaaggg
                                                                     3720
aatttgctgg tgaaaagagg ctggatcttg tggaagactg tcttggatgg ggaagtacta
                                                                     3780
cctggagatt tcaaattcac ttggcctgca aacaacagag ttatccgtat cttccacatg
                                                                     3840
tgaatgtcat tgcaagggtg actctagaca aactacaaac cgatggaccg tcaagctccc
                                                                     3900
caggagecee tiggatggea gegitgette agagigitte eigitteigg aatteetigt
                                                                     3960
tagggaactt taaagaagaa aagaaaaact tgaattgtgt tgaattactg tatcttttac
                                                                     4020
tttttttt ttgaaaagat aaacttgtca atagagtgat ttgaaatact atatggcaaa
                                                                     4080
gttttatatt tgatattett taagitagtt geteacacac ttaggetttg attgetgaag
                                                                     4140
aagtatgttt aagagggaga gaggggaggc aaagctgaag agagtcaagg tcactgtccc
                                                                     4200
cgcttcggcc tgaaggaaag agaagacatt tctatggcct tgctctctgc tgtcctgttg
                                                                     4260
gtgggcacga cacatcagtg gtgttcagtc tttatgtgtt tttaagcatc ccttgggctt
                                                                     4320
tggatttgga gatgggaaga gcatctccag gcaatgagtt tttcaaagaa tgcctactta
                                                                     4380
gtagtaagat gaagctcagg atttaaataa gtggggtcag gcattcgagt ttttgtcttt
                                                                     4440
cttctcaggg gtatttcttg gtacccccaa gatatcaggc cagaaagaga tgagtcagtt
                                                                     4500
getgtgetet ttaettettt ttetecacat ettetgagge tttagaaatg tggacaaget
                                                                     4560
agttttcaaa ttttgtgtgc gtctgtaagt tcttaaagaa ccagcttctt agaatgttca
                                                                     4620
gttotcaatg tgotgotgot ttocottoto ctaaacattt taaaactott cootttoaco.
                                                                     4680
tccaattccc gtgatcccaa aagaagaga agactccagg aggggtatag attgtgccgt
                                                                     4740
catagettta caggtggttt taaagttage aggggtttgt catggtgatt cactacteag
                                                                     4800
tttatcagct caaggattat acagctcttt tccgggaact cacccaggag caagcgagac
                                                                     4860
actaccattg aatcagggaa tgagaattaa gaatggacag gaccaagaca gaactcaaga
                                                                     4920
aagccactgg ggaaaactcg agaagaaagg gagtatacta gtaggttaga tctgtgaacc
                                                                     4980
tgaggacaag aagacettgg gaaatggagg ceteagggga tgtgcattea catactatta
                                                                     5040
cgcttctcaa agagagacca acatcatgct tttaacacat ttgatgaggt tttttatttg
                                                                     5100
tgtttttgtt tgttttttga gatggagtct cactctgtgg cccaggetgg agtgcagtgg
                                                                     5160
egegatettg geteactgea accteegeet eeegggttea ggtgattete etgteteage
                                                                     5220
ctcccaagta gctgggacta cgggcatgag ccatcacacc cggctggttt tttgtgtttt
                                                                     5280
tggtaaagat ggggttttgc catgtttgcc gggctgatct cgaactcctg acctcaagtg
                                                                     5340
atctgcccac ttcggacccc caaagtgctg ggattccagg tgtgagccgc tgcggccgac
                                                                     5400
cacatttgat gtttgaagtt gtaatctgtc ccatcataaa cttacctgga gctcatgtgg
                                                                     5460
aggaacagaa ggccaagatc cttgctttgg gggtgcctca cgaagcatcc ctgtagacac
                                                                     5520
ttggccccag cttcactgct tggaagcatg teceteeete ttgagttgge tetgatttga
                                                                     5580
```

```
aatcgggaga aacagagctg ctgccaatgg gatcttttag gtaactccct ccctagcttc
                                                                     5640
                                                                     5700
cgtgtgtctg tgcagtgccc atgagctgct gccaatggga tctttcaggt accccctccc
                                                                     5760
cagetteect gtggetgtge ggtgeeettg acagatgget tetetgttte cetttgeeca
gecaggetee ceteetteet attagetaca aaactggata aactteagaa tatgagecaa
                                                                     5820
tgagtaggaa ggaacttgaa gactaaagat tttactctct cccctatcca tgccccctac
                                                                     5880
ctctgactct ctctgtgtga acaggaaact ttagggtaga tgaggagaat gaattggtta
                                                                     5940
tcagagtgga agaccatggc ccaggatccc tgagctttcc cagtagcctc cagtttcctt
                                                                     6000
tgtaagaccc agggatcact tagccatagc ctgaatcttt taggggtatt aaggtcagcc
                                                                     6060
teteactett cetteaggtt actaacaaaa tttegtaget aaagaatgee atggeegggt
                                                                     6120
gcagtggctc acgcctataa tcccagcact ttgggaggcc gaggcgggcg gatcacgagg
                                                                     6180
tcaggagatt gagaccatcc tggctacgac ggtgaaaccc cgtctctact ggaaatgcaa
                                                                     6240
aaaattagee gggtgtggtg gegggegeet gtagteeeag etgetetgga ggetgaggea
                                                                     6300
ggagaatgge atgageeegg gaggeggaga ttgeggtgag eeaagatege geeeetgeae
                                                                     6360
tccagcctgg gtgacagagc cagactccgt ctcaaagg
                                                                     6398
```

```
<210> 5419
<211> 958
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (70)...(710)
<223> similar to gi2914017 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5419
aaatcgaatt cccgtgtcga cccacgcgcc cgcgccattc tctaggagga ctgagcagat
                                                                       60
ggtgggcagg tcctgctggg cagcaagatg gactttgctg ccgtggatga gaatggaaac
                                                                      120
aatgetette atettgetgt catgeaegge eggeteaaca acateegggt teteetgaca
                                                                      180.
gagtgcacag tggacgccga agcctttaat ctcagaggcc agtcaccact gcacattttg
                                                                      240
ggacaatatg gcaaggagaa tgcagcggcc atctttgatc tcttcctaga atgcatgccg
                                                                      300
gggtatecte tggacaagee ggatgeagae ggeageaegg tgetgeteet ggeatacatg
                                                                      360
aaagggaacg ccaacttgtg ccgcgccatc gtccggtcgg gggctcgcct cggggtgaat
                                                                      420
aacaaccagg gagtcaacat cttcaactac caggtcgcca ccaagcagct cctgttccga
                                                                      480
ctgctggata tgctgtccaa ggagcctccg tggtgtgacg gctcctactg ctatgagtgc
                                                                      540
actgccaggt teggagteac cactegeaaa caceaetgte gteaetgegg aegtettett
                                                                      600
tgccataaat gctcgaccaa ggagattcct attataaagt ttgatctgaa caagcctgtg
                                                                      660
egggtttgca acatttgttt tgatgtactg actetgggtg gggtttetta gtgageeece
                                                                      720
cggagggtcc aggccacgtc cttggtcacc tecccagcag ctgctctgct caccagcctg
                                                                      780
accccaccca gagcaggagc tggcgggtgt cttcctgcgg caatagactg gaacgattaa
                                                                      840
ggaccatggt gtgatagatc ccatttcaaa tgattccata tgattgtcag tgtgtgtc
                                                                      900
agactgtgat cgatttcact agatgtctca ctcatcagac caggccattg ggcctaag
                                                                      958
```

<210> 5420 <211> 1087

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1078)...(630)
<223> similar to gil213535 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5420 tttttttttt ttcaagatgc aaaaaacttt tattttttga ttacatggcc tcagatagtt 60 tcaatcaata ccatcaacaa cgaattttat gaaacacgtt tgtctttcct gtctacatag 120 atgccacagt agccctagtg tttaagtgtt gcctctcaaa cttgtcctct ttccagcatt 180 ctcctctctc aacctgccac tcttgaaaac tcacttttct tttgcatttt qttctacatq 240 tgaaaaatat ggaactcaag taagacccaa ggtagatccc aagggcttca gaaataccct 300 gtcaagggca cagaatggtt agcaatagag tccctattta aggtcaatca tcgttaataa 360 catgaatctt aaattctaac attacttact taacagtccc taaattctaa tattcctaac 420 ttcacaaaac aaacttttct aaaacttctt accagtaaag gatatagctc acattaatat 480 actictaagat aaccttaaga attictteatt geettgtaat teetgeeaag tgtttteate 540 acatececaa ggetaateet agecatetee tgeataattt ttetataata ettetgeaca 600 tacacagcaa atggtcacac gtggggcaca atacgggtcc catctttctg agttaatggc 660 accatgacca gagacccctt gcatttggca cagatgaagc ggctggtgtc caacgatttg 720 gtgtagcagc caatcctcgt tttgcatcca gtacattcat aatggacctt gtagttaatc 780 ttatagttat ggcaacgggt gaccetggge ageteegggt gtateetgtt ggattteetg 840 gcataatact tecatgegte accatgagaa teatggatac cateaateag ecaggaggea 900 gcatggcaca tttcatggat caaggtatcc cggattcggt ctgcagagtc gcagactttc 960 aagccaatct ggatcttggc aaagcgccgc cactttgggt accacatctc accagtgctg 1020 cataagccag cagttticac catcitgtta ticcagccta tgcgtagttt ctctggcagc 1080 tttttat 1087

```
<210> 5421
<211> 2372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2373)...(1498)

<223> similar to gi3850564 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5421

ttttttttt ttcaagcaca tccaccatg gtggctttat tcagtcacgt ccccacgccc 60
acggctccct ccaccaggca gacagagggg aggccacccc actgcaaagg gtcccagcca 120
gtgggcacca acctcaggaa gacgtggtcc ccacctggag cttccctcgg ctgccctggc 180
ccttgagccc gtcctgagga tttgtgcttt gactctgaca gggagcagca ggaagctgcc 240
agcccactgc ctccatgcgg gtccttggag ggcagacggt ggagcggcgc ttcctcagct 300
```

```
cccgcggtca ggccccatca gggatggtca cagtccagcc acaggggcga ctctgcccat
                                                                      360
cagtecect ggggcagega ccagatectg getggggcag caeegggaca ggeeetetet
                                                                      420
atgggeetaa ggteaatgea ggtggggget tgetgggeee aggeeaatga acceaecegt
                                                                      480
aggageeete aetgggeage agggeeagga gggeaeeagg gaetggeege agagteeaet
                                                                      540
cggggcaggc gtctgtggct tggaacctgc cctcgccaag gcactggggg gttaaggagc
                                                                      600
agatecetea gaeggeettg ggeeagaage teeetggaga getgggeace tegaggageg
                                                                      660
tetgggagee teaccetgte ceagtggete etgggacece tgggagegte ageaceacee
                                                                      720
caaagctggg tgcctgtgtc gccactaaac agaagggaaa ccgaggcagg ggggccggct
                                                                      780
                                                                      840
ggcagtggag cattetggca gegeegggeg accaagteee gaetggcage ggetggagtt
tggttttcag aagcgaaggc tggcgttggc acacagggaa ggctgcccga tgacgtgcct
                                                                      900
cgactgtgtt acatttactg aaggagagcg gcctcctggg cacgccactc aggcacggtg
                                                                      960
aggetetgtg geaceaceag eegeatggea gggeagagag tggegeegte etgeatgeee
                                                                     1020
eccacageag accagagtee egtecteaeg etgeacagtg ggtgatgtga gttteaaaae
                                                                     1080
tacgcctcca gaccgagaaa ccctcccagc tgtcagcaag ccgtggcgcc gagctgccgg
                                                                     1140
gcacctgctg gctgctctcc agtctcaagg agctgggaca gcgggcatgg ggaggagctg
                                                                     1200
gcctcgagcc caaaggtcgt agggagccag gcagggccca ggagcacccg gcacttcccg
                                                                     1260
aagccggact ctgtagagga cgagcgtgga gggtctttcg ggtgggggca gccccagctg
                                                                     1320
tgtgccccga ggccccggga agtggggacg ggccgaggag ggagccagga gcacggcctt
                                                                     1380
cetectgggt gtetecaagg etgggetteg eegeegagee tggtteaegt ggggeegagg
                                                                     1440
accgcgtctg caggcggctc cagcaggcag cacgggctct cggcagggcc tctgccctag
                                                                     1500
acgtgeteca teteegggte egggteggge testeetest cetesteste gtettesteg
                                                                     1560
                                                                     1620
tegtegteet cagegeagge ettgteeage ggegeeteee egteaeggge cageteetee
acgtgcgcca gcatgtcggc catcagcgcc tectccagcc gcttccgcac ctgctgcacc
                                                                     1680
agetetteet getteatgat gteetegteg gteaceatga aggetttgea caggggetge
                                                                     1740
gtggtgttga gccatacgcc ggggttcttc tccacggcgg ccgagagctg tcccgtgatg
                                                                     1800
ggcatggtgc tagtgtgcag ggcgctggcg atggccgaca gcagcgtctc atccgtgcag
                                                                     1860
ccaggtccca cccctgcag gcccttgggg aggtccatgg tcttgaccag ctcctcagca
                                                                     1920
atgtcgaagg cgttcaggcc gctcagcttc ttctcccaga agagctggcg cggctggtcc
                                                                     1980
accgccttct gcgggtcgct cttgaccttg ttgctggggt ggttggtaat cttggtcacc
                                                                     2040
ggctgcttga agatggacgc cgtctggcgc acgggcagcg ccgtgttcag gtcgggcttg
                                                                     2100
ccettgacet ggttggagga gtcgtagcgc acgcgctggc ggctcttgtt catcttgctc
                                                                     2160
atcagcatct tgcccgtgcg gaagtcgaag gtgctcaggt ccatggagcc gcccaggtag
                                                                     2220
egegecaget geggettget geggaactte tteeegeteg ggetatagta aaagacatee
                                                                     2280
ctgtggccgg ccgacagece cgacettetg ggcaettett ccetetecca gecetgcggg
                                                                     2340
agcgccgggc actcccacct cttccgctcc at
                                                                     2372
```

```
<210> 5422
<211> 1799
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1801)...(1052)
<223> similar to gi4972684 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5422
gttaattttg gttccttaaa acgcccccc cctttttttt ttttttcctt ccttttttt 60
ttttgcgaga cagggtctca ctttgtggct caggctggag tgtactggca cgttcttagc 120
```

```
teactgeage ettgaactee tgggeteagg caateeteet acettageet eetgagtage
                                                                      180
taggactaca ggaatgtgcc atcatgcctg gctaattttt aagttttttg tagagatggg
                                                                      240
atctcactat gttgcccaag ctggtttcag attcctgtgc tcaagggatt ctgctaactt
                                                                      300
ggctccccaa agtgctggga ttacaaatgt gagccactgt atctggccca tattcttttt
                                                                      360
taagaaaaga tgcagaggtg ttaaatatta atatcaaatt gtccaggcat ggtgtttatg
                                                                      420
aaattgtgtg ccctctgaca ggcaaccaaa cacacagac ttcatttctt tattaattcc
                                                                      480
tgcctcatca tcttttctca ttgatgctcc ttaatgtcaa aggaatctct ctctctcaca
                                                                      540
                                                                      600
cacacataag accaaaacaa atatcttgaa catgcaaaaa aatagtctac gcttttgaat
                                                                      660
agtgtgcact gttgaatagt gtgcactgtt ggatagtgtg cactgttgaa gtgtgatgtg
cctaaggcaa caggatettg ggaaagetet agatttttgg ettegaaata aaactgcatg
                                                                      720
ttgaatagca ggtttttaca tttattattg ttgtgtattt cctccccttt ttgcaatact
                                                                      780
atctacgctg agttatctat tgccaactag caccaattct ccaaatcaaa gtgtgtgagg
                                                                      840
aaaacacact cgtgcaatcc tctttaacag aagatacacc aagtaacctg tctgtctact
                                                                      900
tetgttacce agaaataaaa gaacttgaag ggetgettgg etgggagggg gteeegggtg
                                                                      960
gggaagagge atcetgeeet cagtegggaa tecatggtga acagetggat gteetgtgga
                                                                     1020
ttccagtaca gggccgactg gctgagttgt agacaagaga ccagacatag gggataaaaa
                                                                     1080
actecteggg etgeteetet teeacatatt tgaattteaa ttetggaaat ttetteagte
                                                                     1140
tgtctttggg cagcgcaacg acgccttgct taatgatttc caggacccgt tccactgaca
                                                                     1200
getcagetce agettgeage aacettgage taaagaagga gatcaccaga teaatatttt
                                                                     1260
gcattatatc ctgaaatgaa ggatgagttc gaaattgttc aaagagatcg cgtttgtaaa
                                                                     1320
gcagggcgta taccaagttt gggttgtggt gaagggaatt tgtcaggcag gagttgatga
                                                                     1380
tetetaacat cattegaate aettetteaa tgacatttag gtettgtgea taatetggta
                                                                     1440
gaggaacatc attagaactc agcgaacctc tcaaggactg tgtggcttgt tccagaactt
                                                                     1500
tgttgtgttt tttagacagc aaagaaaata aactgatgat cctctgggca gcatactgat
                                                                     1560
ggagagaacg aaactgtgcc gacatatttg ctaaagctgc caaacaattt qtqtcaaqqt
                                                                     1620
acttgteteg tgteetagte atgttgtatt gaatggttet tattaceace aggateagga
                                                                     1680
gactccccaa ggagatttca gttaaaactc gttctgaata ccaagtaata ttttttagta
                                                                     1740
teactteatg aatggatetg ttgaageeat catetteegt aaggateaac aatattata
                                                                     1799
```

```
<210> 5423
<211> 1255
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (42)...(460)
<223> similar to gi4539001 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5423
cgcgagaccc gtccggaatt accggcacga cccacgcgtt cgaaaccaat aaaaacaatc
                                                                       60
ctgggaagac taagacttta gatccaaagg ctgtctttca gagaacaaag gaacactgcc
                                                                      120
tcatggggat caaaggaact gtgaagcgta gcacagacgg ggacttcatt catgctaatg
                                                                      180
ttgacattga cttaattatc acagaagaac ctgaaattgg caatatagaa aaacctgtag
                                                                      240
aaatttttca tataattgag catttttgtc ttggtagaag acgccttcat ctatttggaa
                                                                      300
gagatagtac aattegaeea ggetggetea eagttggaee aaegettaea aatageaaet
                                                                      360
acaatgcaga aacatatgca teetatttea gtgeteetaa tteetaettg actggttgta
                                                                      420
cagaagaaat tgagagactt cgaccaaaat cgcctcctcc caaatctaaa tctgaccgag
                                                                      480
gaggtggagc tcccagaggt ggaggaagag gtggaacttc tgctggccgt ggacgagaaa
                                                                      540
```

```
gaaatagatc taacttccga ggagaaagag gtggctttag agggggccgt ggaggagcac
                                                                      600
acagaggtgg ctttccacct cgataattgt tgaagacatt gaacctattc atcctcctct
                                                                      660
aaccttcttt attgcaatta aatttcaagt gggagactta actttagaac tcacttccag
                                                                      720
cttgcacttt gctttaattt ctctgagctg caagaatgtc ttagcgagcc ttgcttgcag
                                                                      780
ttgtcacaca cactgtccgg tttttttcag gataaatgaa tgattctgcc ttttgttatg
                                                                      840
tgcgtgaaca gaatggaaca actcaagtag cttcatcttc agagactgaa tttattctga
                                                                      900
tagacttcag ctaattacaa aggattttgc taatttttgg gaataaataa tggaaaaaga
                                                                      960
tccagtctgt ggtatcatgc tagtgctgac agggccttga tagaatagag ttggaaaaga
                                                                     1020
tggtaagett ttgtcagggt tttaacattt tettgatgaa acaataaaaa gaggtaaget
                                                                     1080
tttttcttct tttttttat agttttaaat aaactcagat ataatttgaa tactgaagaa
                                                                     1140
attaagagac tttgaacaaa aactcttccc aaatctaaat ttgatagggg aggtggagat
                                                                     1200
tccaggggtg ggtgaaagaa gagatagaac ttagcaggca gacttaaaaa aaaaa
                                                                     1255
```

```
<210> 5424
<211> 2830
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(847)
<223> similar to gi5106521 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5424
acaacccctt ctcctggaag aactttgtag acaccgtccg cgacaccacc gccgcgcacc
                                                                       60
aggetetget ggtggeeaag aacgtegaet egttteegea aaaccaggag egetteggeg
                                                                      120
ggggccacat cgacgtgtgg tggatcgtgc acgacggcgg catgctcatg ctgctgccct
                                                                      180
tectgetgeg ccageacaag gtgtggagga agtgeeggat gegtatette accgtggeec
                                                                      240
aggtggacga caacagcatc cagatgaaga aggacctgca gatgttcttg taccacttgc
                                                                      300
gcatcagcgc cgaggtggag gtggtggaga tggttgaaaa cgacatatct gctttcacct
                                                                      360
acgagaggac actaatgatg gagcagaggt cgcagatgct gaagcagatg cagctgtcca
                                                                      420
agaacgagca ggagcgagag gcccagctga tecacgacag gaacaccgcg teccacaccg
                                                                      480
cggcggcagc caggacccaa gcgccgccta cgccagacaa ggtgcagatg acctggacca
                                                                      540
gggagaaget gategetgag aagtacagga gcagagacac cagcetatet ggtttcaaag
                                                                      600
acctetteag catgaageeg gaccagteea aegteaggeg gatgeacaeg getgtgaage
                                                                      660
tcaatggcgt cgtcctcaac aagtcccagg atgcgcagct ggtcctgctc aacatgccag
                                                                      720
gtcctcccaa aaaccggcag ggagacgaga actacatgga gtttcttgaa gtcctgaccg
                                                                      780
aggggctgaa cagagtcctc ctggtcaggg gtggcggccg ggaggtgatc accatctact
                                                                      840
cctaatgccc aacagcatca cggcactctg ggacaggcac ggaggacggc gtgggcagcc
                                                                      900
tgggcctggg cttggcccag ggaaacagac ggcagacaca cctgtccccc agtgatgcca
                                                                      960
cccaagetge ccatgggget tectacggaa gtttctagge ccgtcaccta gggetetect
                                                                     1020
gttcagcctt aacaggctca gcaaatcagg gcgtggctgg acgatttcct tgcatctgag
                                                                     1080
ggcagacgct gctaccggag tgacctggac gtggccagat cttctcgcag gtcacaagaa
                                                                     1140
gccagtgagc ccttgccttg gtttctggaa gttctttcc ttggctggat ttacccagtg
                                                                     1200
gttaggttgc atttctaccc catccagaac attcttggaa gagcacccgg agctgaagct
                                                                     1260
gtccctgatg atgaaggtga aacgtcagcc ctggccatgg ctccgctcag ggccccggtc
                                                                     1320
acctccgagt cactctgttc cttgactgtc tttgtgtttc tgtacctcaa ggcactgaag
                                                                     1380
ctggaggact ctgtccatgc ccgtgtcacc ctcgtgtggg agcctctggg ctcggcaggt
                                                                     1440
ccacatttca tgagctgagg cgtgggccag ggccatctgg aaagggaact cggcttttcc
                                                                     1500
```

```
agaacgtggt ggatcatctg tcgggtgtgt ggtgaacacg ttcagttcat cagggcctac
                                                                     1560
geteegggaa ggggeeeea getgtggete tgeeatgeeg ggetgtgttt geagetgtee
                                                                     1620
gagtetecat ceacetttag aaaaccagee acttetttte ataageactg acagggeeca
                                                                     1680
geccacagee acaggtgega teagtgeete acgeaggeaa atgeaetgaa acceagggge
                                                                     1740
acacgegege agagtgaaca gtgagtteee eegacageee acgacageea ggaetgeeet
                                                                     1800 ·
ccccacccca ccccacccca ggagcacggc acacagttca gcctctgagc tggctcacac
                                                                     1860
gtgccatccc cacccggtg ctccagggaa ggaggacacg gacccgacgt gggaggtcct
                                                                     1920
caggcagcag tggcgcctgg tgtcaggtct gtctggctga gtcccgggcg tcccctgcca
                                                                     1980
tggcctgtgc cttgcatgga ggcggggtg gcactgaaga gatagctttc aagggcccaa
                                                                     2040
cactttgcac ttcggctggc tgtgagtttc tgctttgtag gttgtggtca catttgcagg
                                                                     2100
ctgcgggcag tggcaccgac ttgggcctcc ctttctatgt ggcatattta tttatttaaa
                                                                     2160
caccccaggg agttacgtgg taacaaggtt gtccataaag aggttgcttc tatatactag
                                                                     2220
aggececaga tggceaggee ttgggetacg tetggettge atggtetece aagggaatea
                                                                     2280
gccccatcaa caaagttcaa atcggggcag aggctgcact tgtgccccca gatgtttctg
                                                                     2340
aggagecaga ctagggetgg cattgetgta gagtgaegge tgetgeecag agegtgteec
                                                                     2400
agacatcaca geggggetea geagtteeca cageetetge etgeettgge taageatgag
                                                                     2460
ttaagcagca aaacgctcct ccatgtctgg atggggccgg caggtcctgt gtcccctgca
                                                                     2520
cctggaggag agcaggctag aggcacagcg gccacatggt gctggctctg aacgttggtt
                                                                     2580
ggtggctgga aaacagccct gcttctgagg gccgctcagt tctgcacacg aaaccacctc
                                                                     2640
ctgagggete agetetgeee eegeeetggg etgeageete tgeaegeaag eaceaggeat
                                                                     2700
cctttgtgtt gtcaactccg tgtaaccagt aactacagcc atttacaatt gactccgttt
                                                                     2760
ccttttgtag gtttccctgt ctgtctgtgt tagtagaaaa ataaaatcct atgaaatctg
                                                                     2820
                                                                     2830
```

```
<210> 5425
<211> 1247
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(704)
<223> similar/to gi2645856 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5425
atttcattaa agaaaacagc tttctgccat ttcaaattga ccacatcagg cagatggcgt
                                                                       60
atcagatctg ccagtcaata aattttttac atcataataa attaacccat acagatctga
                                                                      120
agcctgaaaa tattttgttt gtgaagtctg actatgtagt caaatataat tctaaaatga
                                                                      180
aacgtgatga acgcacactg aaaaacacag atatcaaagt tgttgacttt ggaagtgcaa
                                                                      240
cgtatgatga tgaacatcac agtactttgg tgtctacccg gcactacaga gctcccgagg
                                                                      300
tcattttggc tttaggttgg tctcagcctt gtgatgtttg gagcataggt tgcattctta
                                                                      360
ttgaatatta ccttggtttc acagtctttc agactcatga tagtaaagag cacctggcaa
                                                                      420
tgatggaacg aatattagga cccataccac aacacatgat tcagaaaaca agaaaacgca
                                                                      480
agtattttca ccataaccag ctagattggg atgaacacag ttctgctggt agatatgtta
                                                                      540
ggagacgctg caaaccgttg aaggaattta tgctttgtca tgatgaagaa catgagaaac
                                                                      600
tgtttgacct ggttcgaaga atgttagaat atgatccaac tcaaagaatt accttggatg
                                                                      660
aagcattgca gcatcctttc tttgacttat taaaaaagaa atgaaatggg aatcagtggt
                                                                      720
cttactatat acttetetag aagagattac ttaagactgt gtcagtcaac taaacattet
                                                                      780
aatatttttg taaacattaa attattttgt acagttaagt gtaaatattg tatgttttgt
                                                                      840
```

```
atcaatagca taattaactt gttaagcaag tatggtcttg ataatgcatt agaaaaatta 900 aaattaattt ttcttttga aattaccatt tttaaatacc tttgaaatat cctttgtgtc 960 cagtgataaa tgtgattgat cttgcctttt gtacatggag gtcacctctg aagtgatttt 1020 ttttgagtaa aaggaaatct tgactacttt atattcttaa aggaatattc tttatatact 1080 tcaaatttag aacttaactt taaaagtttt tcttctgtaa ttgttgaacg ggtgattatt 1140 attaactcta gataagcagg tactagaaac caaaactcaa aaaatggtta ctggtagaat 1200 tctattaaca tttaagggct ggattcttt tgattgggcg acgtcat 1247
```

```
<210> 5426
<211> 626
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (78)...(599)
<223> similar to gi5304869 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5426
tecegtgteg acceaegegt eegeteette tgaaggaagg agttecagea actgatgtag
                                                                      - 60
tetgteegga etetegetgt ggeeaegtat tetgeegtte etgtattget accagtetaa
                                                                      120
agaacaacaa gtggacctgt ccttattgcc gggcatatct tccttcagaa ggagttccag
                                                                      180
caactgatgt agccaaaaga atgaaatcag agtataagaa ctgcgctgag tgtgacaccc
                                                                      240
tggtttgcct cagtgaaatg ägggcacata ttcggacttg tcagaagtac atagataagt
                                                                      300
atggaccact acaagaactt gaggagacag cagcaaggtg tgtatgtccc ttttgtcaga
                                                                      360
gggaactgta tgaagacagc ttgctggatc attgtattac tcatcacaga tcggaacgga
                                                                      420
ggcctgtgtt ctgtccactt tgccgtttaa tacccgatga gaatccaagc agcttcagtg
                                                                      480
gcagtttaat aagacatctg caagttagtc acactttgtt ttatgatgat ttcatagatt
                                                                      540
ttaatataat tgaggaaget ettateegaa gagtettaga eegggeaett ettgaatatg
                                                                      600
tgaatcactc gaacaccaca taattt
                                                                      626
```

```
<210> 5427
<211> 519
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(453)
<223> similar to gi5712195 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5427
gettaagege tgeccagaag gecaaggtga ageactegge categeggtg gttgteatet
                                                                       60
tectagtetg ettegeeeeg taccacetgg tteteetegt caaageeget geetttteet
                                                                      120
actacagagg agacaggaac gccatgtgcg gcttggagga aaggctgtac acagcctctg
                                                                      180
tggtgtttet gtgcctgtcc acggtgaacg gcgtggctga ccccattate tacgtgctgg
                                                                      240
ccacggacca ttcccgccaa gaagtgtcca gaatccataa ggggtggaaa gagtggtcca
                                                                      300
tgaagacaga cgtcaccagg ctcacccaca gcagggacac cgaggagctg cagtcgcccg
                                                                      360
tggcccttgc agaccactac accttctcca ggcccgtgca cccaccaggg tcaccatgcc
                                                                      420
ctgcaaagag gctgattgag gagtcctgct gagcccactg tgtggcaggg ggatggcagg
                                                                      480
ttgggggtcc tggggccagc aatgtggatc ctgtgcact
                                                                      519
```

```
<210> 5428
<211> 1566
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(690)
<223> similar to gi3947712 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5428
aagaattcag ggaaaagcaa aaactacaac gaaaaaagac agagctcata atggatgcta
                                                                       60
tccataaaca aaagagctta caattcaaga aaaccatgga tgcaaagaag aactatgagc
                                                                      120
agaaatgeeg ggacaaagat gaggeagaac aggeegteag eeggagtgee aacetggtga
                                                                      180
acccgaagca acaagaaaag ctttttgtga aactggcaac ttcaaagacc gcagtagagg
                                                                      240
actcagacaa agcatacatg ctgcacatcg gcaccctgga taaggtccga gaagagtggc
                                                                      300
agagtgagca catcaaggcc tgcgaggcat ttgaggctca agaatgtgaa cgaataaact
                                                                      360
tetteeggaa tgeattgtgg ttacatgtga atcagetgte acaacaatgt gteaceagtg
                                                                      420
atgaaatgta cgaacaagtc cgaaagagtt tagaaatgtg cagcattcag agggacattg
                                                                      480
aatactttgt gaatcaacgc aaaactggac agattccacc agcacccatc atgtatgaga
                                                                      540
atttctactc ctcccagaag aatgcagtcc cagcaggaaa ggctacaggg cctaacttgg
                                                                      600
caaggagagg acccctccca attcctaaaa gctcaccaga tgatcccaat tactctttgg
                                                                      660
ttgatgacta cagittgcic taicagtaaa aicaatgaaa ccagagciit ticcggciag
                                                                      720
tgcttctgtg atatggaaag ggcacccaga gcagcaggac ctatagccac gttatgtcag
                                                                      780
caatgaagac titgaagtga accettgeta taatttttta gagatttaaa atttatggta
                                                                      840
gacatttagg acaacataag caagtagagt totgoagttt tttgaagttt acaaattgoo
                                                                      900
ccattetgaa gaattattat tteecagtta eteaggttat gaatgaatta ggtttteaac
                                                                      960
atgggaagca tgaaatccac ttctggattt ggagcatcca cttgaggagc agaggtggca
                                                                     1020
gcagaggatt ctgagccacc aactgcagta gtggctcctt tggctttggg cagcctggct
                                                                     1080
gtggagtttc cacggcgaca cacagcctca gtggtgcaag atttaaaatt accttccttt
                                                                     1140
ttggctggaa gacttagaag ccgcctgatc atactttctc attttacaga tgaggaaata
                                                                     1200
aagcctacaa gtgtgaaatt aattteetta eagtttteet agetgatgag ggacagaace
                                                                     1260
agaactagag cctgagccca acccacatca ctattcttct aacccttcct gaagttgtga
                                                                     1320
tgctcatgct gaaatttaag atgccaaata tttttgccag cactttttca gttgggagaa
                                                                     1380
tcaccagggt ttaaatgtca gatttatttt tatgtggatc cctgtgtatg ctgaactaca
                                                                     1440
gagcatgatg tttaatctaa tttaaggagc cactgattgt aaaacatgcc attattttat
                                                                     1500
gttgcactaa gaaggtgggg tcgaggagtt gccaataaac ttgggacaga ctattgatgc
                                                                     1560
caagcc
                                                                     1566
```

```
<210> 5429
<211> 2546
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(942)
<223> similar to gi4559312 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5429
atgeggaggg gegegettet ggegggegee ttggeegegt acgeegegta cetggtgetg
                                                                      60
ggcgcgctgt tggtggcgcg gctggagggg ccgcacgaag ccaggctccg agccgagctg
                                                                      120
gagacgetge gggegeaget getteagege agecegtgtg tggetgeeee egecetggae
                                                                      180
geettegtgg agegagtget ggeggeegga eggetgggge gggtegtget tgetaaeget
                                                                      240
teggggteeg ceaacgeete ggacceegee tgggaetteg cetetgetet ettettegee
                                                                      300
agcacgctga tcaccaccgt gggctatggg tacacaacgc cactgactga tgcgggcaag
                                                                      360
gccttctcca tcgcctttgc gctcctgggc gtgccgacca ccatgctgct gctgaccgcc
                                                                      420
                                                                      480
teageceage geetgteact getgetgaet caegtgeece tgtettgget gageatgegt
                                                                      540
tggggctggg acccccggcg ggcggcctgc tggcacttgg tggccctgtt gggggtcgta
gtgaccgtct gctttctggt gccggctgtg atctttgccc acctcgagga ggcctggagc
                                                                      600
ttettggatg cettetaett etgetttate tetetgteea ceateggeet gggegaetae
                                                                      660
gtgcccgggg aggcccctgg ccagccctac cgggccctct acaaggtgct ggtcacagtc
                                                                      720
tacetettee tgggcetggt ggceatggtg etggtgetge agaeetteeg ceaegtgtee
                                                                      780
                                                                      840
gacctccacg gcctcacgga gctcatcctg ctgcccctc cgtgccctgc cagtttcaat
geggatgagg aegategggt ggacateetg ggeeeecage eggagtegea ceageaacte
                                                                      900
tetgecaget cecacacega etacgettee atececaggt agetggggea geetetgeca
                                                                      960
ggcttgggtg tgcctggcct gggactgagg ggtccaggcg accagagctg gctgtacagg
                                                                    01020
aatgteeacg ageacageag gtgatettga ggeettgeeg teeacegtet eteetttgtt
                                                                     1080
teccageate tggetgggat gtgaagggea geacteeetg tecceatgte eegggeteea
                                                                     1140
ctgggcacca acataacctt gttctctgtc ctttctctca tcctctttac actgtgtctc
                                                                     1200
tetggetete tggeattete getgeetetg tettteeete ttgetgtete tgttteteat
                                                                     1260
tetettteat gtteegtetg tgteteteaa ttaaceaete gteaaetget gattetaetg
ggctgtgggc tcagacctca tttcaggcac cagattggtc gctacaccct ggacaagtga
                                                                     1380
ctgcccgtct ctgagccttg atttcctcag ctgccaaatg ggaagaatag aagaatttgc
                                                                     1440
ccctaaaccc ctcctgtgtg ctggccctgt gctagacagt gctggagaca tagttggggg
                                                                     1500
tggagaactg cccttatgga gcttgcagtc cagtgaggtg gacagacctg tccccagaca
                                                                     1560
gtgatggccc aaaatggtca ggactttaat ggaggaggtg aggtgttgaa agcacaggca/
                                                                     1620
gagtggtcag ggctgaagtc ggagaagcat agggactagg cccaatccag cctggaaagt
                                                                     1680
cagggaggac ttcctagagg aagggacatc gaactaagac ctgaactatg agaaataggc
                                                                     1740
aggaagaagt tgtacctgac tcatttttct caggtgtctc cagggagcag gacccatgga
                                                                     1800
gggacceetg gtgtaggeet gggegataga etetteetea geageetgge aggeaggaaa
                                                                     1860
cagacatagg accccagccc agatetgaat ggcatgggag gtgetgeeet taaccatgae
                                                                     1920
accattgtaa gagctgtcca catttgtatg ttgtgccctg gaatcagcct ggttgagctc
                                                                     1980
aaatcccaac ttagccacgt ctggcctgtg tccttgggca gtcacactac ctctctgatt
                                                                     2040
ttgtttcctt atctgtaaaa tggtgatcat cataatacaa cttcaaaagg atttcaggct
                                                                     2100
gagtgtggtg geteaegeet atacacceag caetttggaa ggetgaggaa ggaggatege
                                                                     2160
ttgaggccag gagtttgaga ctagcctagg caacacagtg aggccttatc tcaacaacaa
                                                                     2220
```

```
ccacaaaatctaaaaattagctgggtgtggtggtgcatgcctgtgatcctggctacttca2280gaggctgaggtggaaggatcacttgaggccaggagtttgaggctgcagtgagttatgatg2340gcactgctgcactccagcctgcgggacagagtgagaccctgtctgaaagaaagaaggaaa2400gaaaagaaagaagagaagagaagaaagaaaagggaaagaaagtgaagaaagaaa2460gaaaaaagaagagaaaaagaaaagaaaaagaaaagaaaaagaa2520aagaaaaagaaaagaaaagtaaagaaaag2546
```

```
<210> 5430
<211> 1785
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(1215)
<223> similar to gi5732618 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5430 teatgacett tgaactetat gaggaattte ttegagetat gggeetteag gagaggaagg 60 agacaateeg tggtgtatae tetgtgattg atcaactete eegaacteat etcaatacae 120 tggaacgcct catctttcat ctagtcagga ttgctctgca ggaagacact aatcgaatgt 180 ctgctaatgc tttggccatt gtgtttgcgc cctgcattct ccgctgccct gacaccactg 240 acccactaca aagtgtacag gacatcagta agactaccac tigigiggaa cigatigitig 300 tggaacaaat gaataaatac aaggetegte teaaagatat cagtagettg gaatttgetg 360 agaataaggc aaagaccagg ttgtcactga ttcgtagatc aatgggaaag gggcgtattc 420 gtcgaggaaa ctatccaggt ccatcgtctc ctgttgtagt tcggttgcct tctgtgtctg 480 atgictcaga ggagacctig actagigagg cagccatgga gactgacatc acagaacagc 540 agcaagcagc tatgcagcag gaggagagag tactgactga gcagattgag aacctacaga 600 aggagaagga ggagctaaca tttgagatgc ttgtactgga accccgtgcc tctgatgatg 660 aaacccttga gtctgaggcc tccattggga ctgctgatag ctcagagaat ttgaatatgg 720 agtetgaata tgetatetet gagaaateag aaagaagett ageeettage teeetgaaga 780 cagctggcaa gtctgaacct tccagcaagt tgcgaaagca acttaaaaag cagcaagact 840 ctttagatgt cgtggactct tcggtctcct ctttatgtct gtctaacacg gcatcatctc 900 atgggaccag aaaactattt cagatttatt ccaaatctcc attctaccga gctgcctcag 960 gtaatgagge eetgggaatg gaaggaeeat tgggeeagae caaatteetg gaagaeaage 1020 ctcagttcat cagcagagga accttcaacc cggaaaaggg caaacaaaaa ttaaagaatg 1080 tgaaaaactc acctcagaaa accaaagaga ccccagaggg gacagtcatg tctggccgca 1140 gaaaaactgt ggacccagac tgcacctcca accaacagct agcactcttt ggaaataatg 1200 aatttatggt ctgaaccggc agatgtgtgt ccctccgtgg ctacagagtg gtaaacaaat 1260 ctcacctttg gggctgcgtt tcatcacctc gtccacaata gtcaatccta attgtggtcc 1320 tgcctctttt ctaagcatat ggctaagact gtatgtgctg aattectggg cctcctgcag 1380 aagcagaaag cctgctgggg atggtgccag ctgtgccttg gctgttgtat ttgaattgag 1440 atttttacta tacaaagcca cctagggcct ggggatttgg gtcagttgta gttgcctctc 1500 ecceacete tittecette ccaaaggigg gigitgaact aggggggata tigetgieet 1560 gagggaccet eteatttetg acatttgaag aaaacgtata aatetttett aacegtgaaa 1620 gcaaaagcct ttgggtttat tttgggatag ttaggagcta gggtagaata taattttttt 1680 ccaaaaactt acttacaaac aaaaagccta atccctctat tttaagattt ctgaaaaaac 1740 actccactcc atgttatatt ctggggaaag caaaaacaaa aaaaa 1785

```
<210> 5431
<211> 881
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6) . . (401)
<223> similar to gi203363 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5431
atgatattet acaggtggtt teteaagget ggaagtaett caaggggaae ttetattaet
                                                                       60
ttteteteat tecaaagaee tggtatagtg eegageagtt etgtgtgtee aggaatteae
                                                                      120
acctgacete ggtgacetea gagagtgage aggagtttet gtataaaaca geggggggae
                                                                      180
teatetactg gattggeetg actaaageag ggatggaagg ggactggtee tgggtggatg
                                                                      240
acacgccatt caacaaggtc caaagtgcga ggttctggat tccaggtgag cccaacaatg
                                                                      300
ctgggaacaa tgaacactgt ggcaatataa aggctccctc acttcaggcc tggaatgatg
                                                                      360
ccccatgtga caaaacgttt cttttcattt gtaagcgacc ctatgtccca tcagaaccgt
                                                                      420
gacaggacag geteceaage teactetitg agetecaaeg etigitaaae atqaqqaaat
                                                                      480
gcctctttct tccccagact ccaggatgac tttgcacgtt aatttttctt gcttcaaaat
                                                                      540
tgtcccacag tggcattctg gagtccgtct gtcttggctg gaaattctct gacgtcttgg
                                                                      600
aggcagctgg aatggaaagg agaattcagg ttaaagtggg aggggtgggt agagaggatt
                                                                      660
tagaagttcc aattgccctg ctaaggagga tcaagacccg taatccggca caacaccctg
                                                                      720
gggttttcca ctctttcaga gaaacctcag cttcatcaca tcaaagttac tccagagcaa
                                                                      780
ccaagcaatt ctcctgatat tgtcatccag ggcttttctt ggccaaaccc cctagaattt
                                                                      840
ccatgtetet gettagetgt getggeaget ageagetgge a
                                                                      881
```

```
<210> 5432
<211> 1617
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1618)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1134)...(441)
<223> similar to gi2677843 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5432
tttttttttta aagattttta tagaatagat gctttatgta aaatattaaa cataaaagga
                                                                       60
caaactgaca tttattccct gagtcctgtg acctgagatg taaatgaggg agccccantc
                                                                      120
ctataaatta aaattgggtg tgtgggtatt atcccataga agcattgcca tatcccccag
                                                                      180
atgectaggg aacagaaaag gtgggtgtge ccaacaaaca caateetace etcecagaaa
                                                                      240
acgcccatcc tgaccttttt attgtcgaaa ttaaaaaaata aaagatactt aaatacaacg
                                                                      300
gtgaacatat agggcaaaac agaatcataa aatttaatgt tgagttaagc agtgagctga
                                                                      360
atgtctaggt ctccaaattg gctttgaacc caaaaccact taaaaacaag tatgttcaca
                                                                      420
gttaacggca attggcttat aggtgagaga atggtcgaag ttgttccagt tgaacttcca
                                                                      480
gggaaattet eteeteaaga acateettta attgttgetg caattegeta tteaatetgg
                                                                      540
ccaaaacggt gttggtttcc ttattacgtc taattgatgc ctgaatagct ttcttatctt
                                                                      600
teccaacaga tetgggaata qaaggttgtg atgeaagaae ageagetaag acaceeqtet
                                                                      660
tttgtgtatg ttcatcaact tctggcctta attcatcttc tgattttaat cttcttcgaa
                                                                      720
caggtttagg tggtggagca agtggtgttg tgcctttgct cacattggca ggagcactag
                                                                     780 ز
cagctgtctt ttcttcagtt ttactatctg ttttggcaac tcgaagagaa cttqcaggat
                                                                      840
cagaagettt ttcagccggc aggacttctg gatgtttctc ggcttcatca tcttgttcgt
                                                                      900
cgtttacatt tgatgcagca aatacttcaa actgactgaa atctgcaaaa tttggttgct
                                                                      960
ctggtatctg ctgaggtgag gtactagtgt gagttatgag gccatcggca tccactgggc
                                                                     1020
gatgcacagc aggaccagga gcctgtgagg gctgtggtct tggaggcact gcaggaggat
                                                                     1080
gggcaacaac tccagcctgt tgttgtcctg catgaataca aaagttcttc tttttagtaa
                                                                     1140
ctgtataatc actttgttaa tagaagaaat aggctgaatg aatgtgacta catgataaag
                                                                     1200
atttotaaga atgittigita agtattagaa ggoaagtaot aacttgitao atggiotigita
                                                                     1260
tgtaacctaa agaccaaatc tcacagcctt tcatcagatc tcactttgct tcttacctct
                                                                     1320
attacatgaa geceteetgg catacteetg cetatteeca taatageaaa caatettgat
                                                                     1380
tttcttcgtg tatctctgac tgctgtttag gtatcaaatg aaaacttcca aattttccct
                                                                     1440
ttcacttaac acttcacttt tcctcaccat tctaaactca cagtgactaa aacataactt
                                                                     1500
catcatecte tgecetaact tttetatttt aaccaaggta acaacaatae tgecagttet
                                                                     1560
tcaaaaatta aaaacctggg taagttatga ctcttcttct tcatcagcca aattgag
```

```
<210> 5433
<211> 1201
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (108)...(328)
<223> similar to gi2879865 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5433
gcgtccgttc aataaagatc tccctcagag ataaggatgt agacttataa gcaggacaag
                                                                       60
actaticate tiettageat titactgegg egeceatega ettataaatg getgitgegi
                                                                      120
atgggagagg agtgttatct ggaaggttta aaggtttaga tctctggaac acattcttaa
                                                                      180
tggaacatca caaaagatca attccaaggg acacctggaa cctcctgctg gactttggaa
                                                                      240
acatgattgc ggatgatatg tctaactacg atgaagaagg agcttggccc gttcttatag
                                                                      300
atgattttgt agaatatgca cggccagtag tcacaggtgg aaaacgcagc cttttctagg
                                                                      360
cagcaagtta agcaggagta agattatgaa atgatttgta teetgeaagg agattgeagt
                                                                      420
cagttcctgg gtgcattgtc gctgattcca gaagtcattc ttgaccagcc atgaaaccag
                                                                      480
```

```
aggegecate ceattetgee ggaggaeage cageggetge tttgtggaea cegeaggaag
                                                                      540 -
ttcctcggga cacggctgct ttgggatgtt tggagatttg tcatcatagc ttttgcgtta
                                                                      600
ggaaatttct gcatgatttt ttaatattta caaaatacta aggtagagcc atagcgccgc
                                                                      660
ctqtqqqacc qcaqaqcatg ctgcqtagct cgcgcgtcag gcgaaccagc qtccqqcaqc
                                                                      720
gtcccgccga atgacgttgc ggtggcactg gcaacacggc atgtgtcctc tgcagggcgc
                                                                      780
tgggttttta tacacgtcaa agctgttaag aatgtgccct aagggagagg atcttgtcgt
                                                                      840
agagtetaat gttttttaaa attggtgeca geaatteaeg atttatattt tttgaattae
                                                                      900
caaatatcta gatttaccag ctctattttt gttttcattt tctctagaca ttcatctgaa
                                                                      960
aatcatttta tggttctcaa tccccatgta gctttgcata gcaacggcac acgtggcacg
                                                                     1020
attocagcag agtitatoto acacegitta tatatoacig ggoototott actiaaatat
                                                                     1080
tatttgacct gcctgagaag cttcataaag tatgttttt taaaatatat tttaattaca
                                                                     1140.
tttaaaaaga catttttcca tgaaaaacat ttattttatg agtgatgaat tatagatttt
                                                                     1200
                                                                     1201
```

```
<210> 5434
<211> 958
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(959)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2)...(426)
<223> similar to gi150149 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5434
tgctaaaatc ttggattatg gaaaatttaa gtatgaaaga aagaaaaaac aaaaagttga
                                                                   60
aaaagaaaaa caatetttea caaacaatag agaaattegt ttatettttg gaateaattt
                                                                  120
aaatgatata aaaatcaaag caaaaaaagc caaagaattt'ttattagata acgacagagt
                                                                  180
aaaagtggot ottogtotta gagggogtga aaatacaaga ootgaacaag gtaaattaat
                                                                  240
tttaaattct ttttttgatg aagtaaaatc gattgcaaaa ttaagtaaag aaatqcaatc
                                                                  300
agttggtaat tttttaactc ttcatattga acgtgataag aaaaaattac ccaaatttac
                                                                  360
ttetteaaaa caaataaagg aattaattga ttttgaaaaa aetataaagg aagaagaaae
                                                                  420
taatgcctaa agcaaaaaca aaatcagcac ttnnnnnnn nnnnnngggg gggccgtttt
                                                                  480
aaaggatcaa agtttacttc cgcgtgcttg caaggtaaaa gtttttttat ggggccccca
                                                                  540
aaattaattc ccggggccgg ggtttaacaa cggggggagg ggaaaaaccc gggggttccc
                                                                  600
cacttaaatg gcgcgcgtgg gaaagnnngn tnnnnnngnn nggnntgtgn gttttggnng
                                                                  660
720
gtgtgggttt tttgttgtgg gggggggttg tgggttnngg ggttggggtt gtgtggtgtg
                                                                  780
gggtggggcg cgtgtggtnc tctgttcttg ccgcgggcgg cctcgccttc ttctttttgg
                                                                  840
ggcccctttc tgccccgggc cgggttcccc gccggggcgg tgcccccggg gcccccttcq
                                                                  900
teegtetget egtetegete gegggeeece etetenetee etettgtgtt gegeetee
                                                                  958
```

```
<210> 5435
<211> 1885
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (10)...(1145)
<223> similar to gi3766209 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5435
eggacgegtg ggegggeagt ggetgteaag eggeteetee gegagtgett tggeetggtt
                                                                     60
cggcgggaag ticaactgct gcaggagtct gacaggcacc ccaacgtgct ccgctacttc
                                                                    120
tgcaccgage ggggacccca gttccactac attgccctgg agetetgeeg ggecteettg
                                                                    180
caggagtacg tagaaaaccc ggacctggat cgcgggggtc tggagcccga ggtcgtgctg
                                                                    240
                                                                    300
cagcagetga tgtetggeet ggeecacetg cactetttac acatagtgea cegggacetg
aagccaggaa atatteteat cacegggeet gacagecagg geetgggeag agtggtgete
                                                                   360
teagaetteg geetetgeaa gaagetgeet getggeeget gtagetteag eetecaetee
                                                                    420
ggcateceeg geaeggaagg etggatggeg eeegagette tgeageteet gecaeeagae
                                                                    480
agtoctacca gegetgtgga catettetet geaggetgeg tgttetacta egtgetttet
                                                                    540
                                                                    600
ggtggcagcc acccetttgg agacagtett tategccagg caaacateet cacagggget
                                                                    660
ccctgtctgg ctcacctgga ggaagaggtc cacgacaagg tggttgcccg ggacctggtt
ggagedatgt tgageddat geogdageda egeddetetg eddeddagt getggddad
                                                                    720
ccettetttt ggagcagage caagcaacte cagttettee aggaegteag tgaetggetg
                                                                    780
gagaaggagt cegagcagga geceetggtg agggeaetgg aggegggagg etgegeagtg
                                                                    840
gtccgggaca actggcacga gcacatetee atgccgctgc agacagatet gagaaagtte
                                                                    900
eggteetata aggggacate agtgegagae etgeteegtg etgtgaggaa caagaageae
                                                                    960
cactacaggg ageteccagt tgaggtgega caggeacteg gecaagteee tgatggette
                                                                   1020
gtdcagtact tcacaaaccg cttcccacgg ctgctcctcc acacgcaccg agccatgagg
                                                                   1080
agetgegeet etgagageet etteetgeee taetaeeege cagaeteaga ggeeaggagg
                                                                   1140
ccatgocotg gggccacagg gaggtgaggt gggctggatg ccacacagat ggtctccgtg
                                                                   1200
ctggctcact gaaagagctg agcctgtggc tggcctcaga atcaggctgg gtgcagtggc
                                                                   1260
tcacacctgt aatcccagca ttttgggagg ctgagtgaga ggatcacttg ageteaggag
                                                                   1320
ttegagacca geetggeeaa catggeaaca ceeeatttet acaaaaaatt tgtaaaatta
                                                                   1380
gccaggcatg gtggcgcacg cctgtagtcc cagctgcttg ggaggctgag gtgggagaat
                                                                   1440
cacttgagec caggagtteg aggetgeagt gagecaggat catgecactg cactecagec
                                                                   1500
tggtccacag agagacactg tcaccccctt tcccccacaa gactggcaga ggctgggcag
                                                                   1560
cctggggctg atgaagcaga gatgttegct ggateccagg ccctggcacc cctcaggaaa
                                                                   1620
tacaagaaaa agaatattca catctgttta atgtgcataa agccaaggaa aggacagttc
                                                                   1680
1740
aaacttggaa taaggggggg gggggggtt tagaaaaaaa aacccttact tgggctgggg
                                                                   1800
gccggggatt ttttttttga ttcgggattc aaactttgac tcgggggggg gcttctttcc
                                                                   1860
ctagggggg aagaaaacc gcccc
```

```
<210> 5436
<211> 621
```

<sup>&</sup>lt;212> DNA

```
<213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(622)
     <223> n = a,t,c or g
     <220>
     <221> misc_feature
     <222> (16)...(100)
     <223> similar to gi3002588 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5436
cgcttcttgt gcaaaaagac gcgtgaggac ggctggtaca aggggaccct gcagcggaac
                                                                        60
ggccgcacag gcctcttccc gggcagcttc gtcgagagct tctgagaact ggtgctccct
                                                                       120
gcacccaget cacagagggg gaggccgcct gggaagetec acggcacaca gagagggage
                                                                       180
catggcgccc caagggttcc aggtcatctc caaggcacct ggcgggggat accetggccc
                                                                       240
agggtggggg ccagggactg tggaggtcgt gccttctccc aaaaccccca aacggagagc
                                                                       300
acacctggga tgttcttcaa ggaaatgccc accccctctg tggaaactgc aaagaaagca
                                                                       360
ccttgaggaa gagaggcagg tgccggcgca ggcaggcctg tggctgtggt ttgcagccat
                                                                       420
ggcagcgttc tcatttacca cctaagcagg gttggaggtt gcaggaggtc tgcaggcgag
                                                                       480
gtgggtggca tgggggccag gagcgctgga gatcatcttt ctgggctgcc ctgggcttcc
                                                                       540
egeggngeee aggttgetet gteaceatte tatatacete agteacetge egeceggetg
                                                                       600
ctcancnaag ggtgtttgag g
                                                                       621
     <210> 5437
     <211> 1337
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1338)
     \langle 223 \rangle n = a,t,c or g
     <220>
     <221> misc feature
     <222> (305)...(1048)
     <223> similar to gi1065454 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5437
caccetgtta tecattlete ttgtgttttg gataatataa gtaettaeat tttgttegtt
                                                                        60
gaatatgctg atggaagttt tcttccagtc tagatacatt caacccccaa gtgtcagagg
                                                                       120
catgttctgt atctaaatat agcacctaat ctccattgtc agatttgtct catgaggaag
                                                                       180
aatgeetgtt gteaeteett etggggaata atgeeaagea getgttggag eaaegttgte
                                                                       240
```

```
cttaacaggt ccattccaaa gctgttttct tcatacctga gccttctgca cggtgacact
                                                                      300
gatttttccc cattttcagg gagctgtgat acacaagttg ggcatcacct tggtgtctct
                                                                      360
cettttgttt ttgacgetaa egaagaeett teetgteace tgeettgtgg atgactggtt
                                                                      420
tgtccataaa gcaagettte eggetegaet etgetaetta tatgttgtea tgcaageete
                                                                      480
aaagcccaag tattactttg catggacatt agctgatgca gtgaataacg cagctggctt
                                                                      540
tgggttcagc ggagtggata agaatgggaa tttctgttgg gatctgcttt cgaacctaaa
                                                                      600
catctggaaa attgagactg ccacaagttt caaaatgtac ttggaaaact ggaatattca
                                                                      660
gacagetact tggctaaagt gtgtgtgcta tcagcgggtt ccatggtacc ccacggtgct
                                                                      720
aaccttcatc ctgtctgctt tgtggcatgg tgtctaccct ggatactatt ttaccttctt
                                                                      780
aactggaatt cttgtcacat tagcagctag agcggtcagg aacaactaca gacattactt
                                                                      840
cetttettea agagetetea aggetgtgta tgatgeagge acetgggeeg teacteaget
                                                                      900
ggctgtctct tacacggtag caccetttgt gatgttggca gttgaaccga ccatcagett
                                                                      960
atacaagtee atgtaetttt atttgeacat cataagtete etgataatae tatttetgee
                                                                     1020
aatgaaacca caagctcata cgcaaaggcg gcctcagact ctgaactcta ttaataagag
                                                                     1080
aaaaacagat tgatacctcc aagagaagcg gaacaagcaa aactgcagaa cgttcgaaag
                                                                     1140
atgagatgac aaggetteaa gggeteetee ggtggettat aggegatgtt tacatgeate
                                                                     1200
tttattttgt tctttttaa agtgcaggga gtannnnnn nnnnnnnnn nnnnnnnnng
                                                                     1260
aaaagggtgc cctttttttt cccaaatttg gaataaaatg gggagaacct ggattttttg
                                                                     1320
aagtccccc tcccggt
                                                                     1337
```

```
<210> 5438
<211> 2370
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (94)...(1453)
<223> similar to gi2988399 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5438 ggtggaattc attattgtta cgtcttccag ctcatgcatt ccaaccctcc ccagccctt 60 cotgoottca totottacot ctatacocaa ggoottcoco gotatocact caacatococ 120 ttetgtttta tgecagggae tgtgatgatt cegggtgtga etcagetgae agagaaggae 180 etcaagtace ggetgeagge gtecagggee aagtecatta teaccagtga etcectaget 240 ccaagggtgg atgccatcag tgccgaatgc ccctccctcc agaccaagct gctggtgtca 300 gacagcagte ggccaggetg gttgaactte agggaactee teegggagge ttetacagag 360 cacaactgca tgaggacaaa gagtcgagac ccgctggcca tctactttac cagcggaacc / 420 accggggccc ccaagatggt cgagcactcc cagagcagct acggactggg ttttgtggcc 480 ageggaagae ggtgggtgge ettgacegaa tetgacatet tetggaacae gaetgacaet 540 ggctgggtga aggcagcctg gactctcttc tctgcctggc ctaatggatc ttgcattttt 600 gtgcatgage tgccccgagt tgatgccaaa gttatcctga atactctctc caaattcccg 660 ataaccaccc tetgetgtgt cecaaccate ttteggetge ttgtgeagga ggatetgace 720 aggtaccagt ttcagagcct gaggcactgt ctgaccggag gagaggccct caaccctgac 780 gtgagggaga agtggaaaca ccagactggt gtggagctgt acgaaggcta tggccagtct 840 gaaacggttg tcatctgtgc caatccaaaa ggcatgaaaa tcaagtctgg atccatgggg 900 aaggegteee caccetacga tgtgcagatt gtggatgatg agggcaacgt cetgeeteet 960 ggagaagagg ggaatgttgc cgtccgtatc agacccactc ggcccttctg tttcttcaat 1020 tgctatttgg acaatcctga gaagacagct gcatcagaac aaggggactt ttacatcaca 1080

```
ggggaccgag ctcgcatgga caaggatggc tacttttggt tcatgggaag aaacgacgat
                                                                  1140
gtgatcaatt cttcaagcta ccggatcggg cctgttgaag tggaaagtgc cctggcagag
                                                                  1200
catcctgctg tcctggagtc ggctgtggtc agcagcccag accccatcag gggagaggtg
                                                                  1260
gtaaaggcat ttatagtcct tactccagcc tactcctctc atgacccaga ggcactaacg
                                                                  1320
                                                                  1380
cgggaactcc aggagcatgt gaaaagggtg actgctccat acaaataccc caggaaggtg
gcctttgttt cagaactgcc aaagacggtt tctggaaaga tccaaaggag taaattgcga
                                                                  1440
agtcaggagt gggggaaatg aggtgcaccc caggaaggcc ccgtagacct ccgaagactc
                                                                  1500
                                                                  1560
cacaagaaac taatggatca ctggtcagtc cccatgggga gcatcatctc ttcgacccta
                                                                  1620
aagatgtcaa aggtgtgcag cttccaaacg gcatccccag gatcactggg caatgctgga
aagagcaaaa gaatatcatt ggccctgatc acatagatgc tgcgccgcct agcaaatgct
                                                                  1680
                                                                  1740
tggtggtteg actteteeet etgtetgggg geaggeteag catetgeeea etggteteae
taagagettt cagattteee teeataggae aggttaecat agaettgggg caettgtggg
                                                                  1800
tactcattct ctgccagtgg gaatgtaaag gcttcatcct ttgtatgtaa ccatttggca
                                                                  1860
                                                                  1920
aaagtatgca ggaacataaa ataaaatatc ctttagctca gaaattctat cttcgggagt
caccacaaa gaaaaaaatc aaaatgcaga aaatgtgtgg tgcactaaga tgatcacaca
                                                                  1980
gcattaaaac taaaaaaaaa aaagaaaaaa ttaacaatta acatccaaac aacaaggaaa
                                                                  2040
tgattaacaa aattgtagta gattaactca attacatatg atgtagccac taaaatattt
                                                                  2100
gagagcagtt tagtatgtct tgggaaaagt gtaagctata ttaattttaa aaatcagagc
                                                                  2160
aaaaatattc atactggaga atcccaactc tgaaaaataa agggaaaact gtggttaatt
                                                                  2220
2280
ttcctttttc cattacattt ctgtattttc caagtttttg tacgaagcac atacaactat
                                                                  2340
tttaatgaaa aagttatgtt aaagaaaaaa
                                                                  2370
```

```
<210> 5439
<211> 1564
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (150)...(820)
<223> similar to gi2645229 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5439
agtgtggtgg aattcgtgaa cttgaagcac ttgcaacttt gtaccagaaa caaaataaat
                                                                       60
atgaacaago tgaacatttt aggaaaaaat cotttaaaat tcatcagaaa gotataaaga
                                                                      120
aaaaaggcaa cttgtacgga tttgcccttt tacgtagacg ggctttacag ttagaagagc
                                                                      180
ttacattagg taaggacaca cctgataatg ctcggaccct caatgaactg ggtgttctct
                                                                      240
actatettea aaataacetg gaaacagetg accagtttet gaagegttee ttagaaatga
                                                                      300
gggagcgagt tetaggacca gateaceetg aetgtgetea gtetttgaat aatetggeag
                                                                      360
ctctatgcaa tgaaaagaaa cagtatgata aagcagaaga actttatgaa agagctttag
                                                                      420
atatteggag aegtgeatta geteetgate accettettt ggeatataeg gtgaageate
                                                                      480
ttgccatctt gtataagaaa atggggaaac ttgacaaagc tgtacctttg tatgaattgg
                                                                      540
ctgttgaaat tcgacagaaa tcttttggcc caaagcaccc tagtgtagct actgccttgg
                                                                      600
tgaacttagc tgttctttat agccaaatga aaaaacacgt tgaagctttg ccattatatg
                                                                      660
aaagagcatt aaagatttat gaagatagcc taggtcggat gcatcctcga gttggagaaa
                                                                      720
cactgaaaaa tttagctgtg cttagctatg aaggaggaga ttttgaaaaa gctgctgaat
                                                                      780
tatacaaaag ggcaatggaa ataaaagaag cagaaacatc actcttgggt ggaaaagctc
                                                                      840
cttcacgcca ttcatcaagt ggagacacgt ttagcttaaa aacagctcat tctcctaatg
                                                                      900
```

```
ttttccttca gcaaggacaa aggtaatagc agcagttaga attctttgca aatgtacctt
                                                                      960
aagacaaaat aattaaacat ttggaacatt tgaatttgaa actttaaaaa aatgttgtac
                                                                     1020
gaaattttac tacgtgtgat ttaactgcta tttgtatgaa gttgtattgg attacattaa
                                                                     1080
gttqqaattq tgattatqtc tgttttagtt gtttaaaaga attttcctat tatatggtat
                                                                     1140
ccaaggatgt agacacatta gaattataag aagacatgag gagcaaatca tgaagagcgg
                                                                     1200
attggtettt gtteaacaag agetggeaga gtagttaaga eaaggagtte aaaaatteea
                                                                     1260
tgaatettgg ccaggeatgg tggeteatge etgtaateee accaetttgg gagggtgatg
                                                                     1320
caggaggatc acttgaggcc aggagttgga gaccagcctg gccaacatgg tgaaaccctg
                                                                     1380
tctctactaa aaatacaaaa aaaaattagc tggacctggt ggcgcatgcc tgtaatccta
                                                                     1440
gctactcagg aggctgaggc atgagaatcg cttgaactca gcaagtggag gttgctatga
                                                                     1500
gctgagattg tgccagttca ttccaccctg ggcaacaggg tgagactctg tctcaaaaaa
                                                                     1560
                                                                     1564
```

```
<210> 5440
<211> 908
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (15)...(677)
<223> similar to gi189044 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5440
agtegtggtg gaatteeett cegtgeetga agtgegacaa gegetteege etgaagggea
                                                                       60
tectgaagge ccaccageac aegeacagea aggagaggee gttetegtge ggggagtgtg
                                                                      120
gcaagggctt caccagacaa tccaagctca cggagcactt gcgcgtgcac agcggggaga
                                                                      180
gaccetteca gtgcccagag tgcaacagga getteegeet gaaggggeag etgeteagee
                                                                      240
atcagegeet geacaeggga gagaggeeet tecagtgtee ggagtgegae aagegetate
                                                                      300
gegtgaagge egacatgaag geecaceage tgetgeacag eggggagatg éettteteet
                                                                      360
gtgagtgcgg caagggcttt gtgaaacact caaagctcat cgagcacatc agaacgcaca
                                                                      420
cgggagagaa gccttttcag tgtcccaagt gtgacaagag tttccgcctg aaggcgcagc
                                                                      480
tgctcagcca tcagggcctg cacacagggg agaggccttt tcactgccct gagtgtgaca
                                                                      540
agaactteeg ggaaagggga cacatgetga ggeaceageg catecaeagg ceegagagge
                                                                      600
cetttgeetg tggegattgt gggaaggget teatttacaa gtetaagett geggageaca
                                                                      660
tcagagtaca cacaaaatcc tgtcctgctc caaatgaact ggacattaag aaaacgctca
                                                                      720
gccaactgtt tgcaatgata gaggccgatt ggagttgagg cagagtggga catccaaagc
                                                                      780
gttgagcagg attggtattg cccaggaatc cacagcaaca gtagccagac ccgctggtag
                                                                      840
acgggtttta ggagcaggta tccttctttg agcaagagtg tcatgcaagt taggaatatg
                                                                      900
aagaacca
                                                                      908
```

```
<210> 5441
<211> 2355
<212> DNA
<213> Homo sapiens
```

<220>
<221> misc\_feature
<222> (38)...(668)
<223> similar to gil708767 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters

```
<400> 5441
tttcgttgat atcttccaga gatggaaaga gtgcagggga aagagccctg cccaggcgga
                                                                       60
                                                                      120
actotoctat otgaataaag ogaagtggot ggaaatgtat ggggtagaca tgcacgttgt
caggggaaga gatggctgtg aatattetet tggactgace eegacaggea tattaatett.
                                                                      180
tgaaggaget aacaaaatag gettattett ttggeetaaa attaccaaaa tggattttaa
                                                                      240
aaagagcaaa ttgacactcg tggtggtcga ggatgatgat cagggacgtg agcaagagca
                                                                      300
                                                                      360
cacgtttgtg ttccggttag acagtgccag gacctgcaaa cacctttgga agtgtgcagt
tgagcaccac gcattettee gaetgeggae geeaggaaae agcaaateea atagateega
                                                                      420
etttatcagg etgggetete getteagatt eagtgggegg acagaatate aagetacaea
                                                                      480
tggctccagg ttacgaagaa ccagcacctt tgagaggaag cctagtaaac gttatccatc
                                                                      540
ceggagacat teaacgttea aageaageaa eecagtgata geageecage tetgetetaa
                                                                      600
aacaaateca gaagtecata attaecagee teaatateat eetaatatee ateecageea
                                                                      660
gccccggtgg catcctcact ctccaaatgt caggccatcc tttcaggatg acaggtcgca
                                                                      720
                                                                      780
ttggaaagca tcggccagtg gagatgacag ccattttgat tatgtccacg accagaacca
gaagaactta ggagggatgc aaagtatgat gtatcgagat aaactcatga ctgcactttg
                                                                      840
agagactgaa gcatctctct tccattcacc ttcatagttt cattgcattc catgaaaagt
                                                                      900
gtcttggcct cagatggatg gatgtgtttg gacgagtgtc tttaaggagt agtcctgaaa
                                                                      960
ggtgtttttg gtgtccatgt aaatatttga agataaaacc actatagctt gtcataattt
                                                                     1020
actgttgact gcattctcat taaaatgaag gtaaaggctc aggaatcata ttgatgttct
                                                                     1080
gattttaaaa ttggagtcaa agtctatgtt tatcatttta ctatgttcct gatgttcttt
                                                                     1140
gttatttaat taatgggagc aaataaaacc agaagagctt gggaagattg ctcagcatat
                                                                     1200
attectifteg tagaagttga gattgetagg gtecagttte cetagtgtgg cetggaegag
                                                                     1260
tcatttcccc ttcattgacc tcattttccc catctgaaaa gagagggttg gactaagtga
                                                                     1320
tetecaaggt cetttecaac tetaaaatte tgeaatttgt taacatttea ttttgtttag
                                                                     1380
gttgaggaca tacattcaaa ctaattttat cacaaggaaa actgcaatac ccacttcctt
                                                                     1440
gacagagtta ctcctttcag aagctaaata aagtatataa cttattagat gttatataga
                                                                     1500
tacaggggga ctttgaattt cacatcttaa agcagttgag ctactttgaa tttaagcagt
                                                                     1560
cgtactaatc ttaaattgca tagcatttgt tttgatcgaa tttgctgctc aagtatggga
                                                                     1620
ataattttta atgicttaat gatiggiget getaactige gigatticag aagacataat
                                                                     1680
tgtgaataca cactgtcaga attgggggat tggtttttac cctagacttc actcttaaaa
                                                                     1740
agcaacgtgc aatcaagatc atttatggct caaatgaaag catataaggt tttcttgaag
                                                                     1800
ttgtgccaaa gcattctgta gagtaggatg agatggttgt tgccctagtc tgttggtaga
                                                                     1860
accagaaatc aatatgttgt cttttaggtt aaagcttgta ccaaaatatt tatttcccc
                                                                     1920
atticaagee etgagicaaa eattittite tettaataat agaeetgaaa igittitatta
                                                                     1980
gtatttctgt gaaatcagtt gattcttgtg ccatttttgt atatgtaatt gtaattttgc
                                                                     2040
ccatgttagg ccctctaaaa aatgtttgac atcctttgag atattttatt actaaaatct
                                                                     2100
gatctttttt ggctactgca aaaatctatt cagcaagaag gtatcagctg cataccttgc
                                                                     2160
acagtggage tgactaceta taaactetee etaaggeatt tgtttacagg tgtatteeat
                                                                     2220
tttagcagac gttctgatgc tcagtgtatg tgctgcatac aaataaatgt gttctgaatc
                                                                     2280
ttttcatctt attgatagca ttttaacaaa tgtgtttcca aggaataaag attattcttg
                                                                     2340
cttttaaaaa aaaaa
                                                                     2355
```

```
<211> 1510
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (96)...(436)
<223> similar to gi4454453 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5442
cgatccgcat ttcccgggtc gacgatttcg taaaactgat cagactgtct cagatcaaqq
                                                                       60
aaaagatggc cagagagaag ctggaagaaa tagattgggt gacatttggg gttatattga
                                                                      120
agaaggttac gccacagagt gtgaatagtg gaaaaacctt cagcatatgg aaactgaatg
                                                                      180
atcttcgtga cctgacacaa tgtgtgtcct tgttcttatt tggagaagtt cacaaagcgc
                                                                      240
tetggaagae ggageagggg aetgtegtag ggateeteaa tgeeaacece atgaageeea
                                                                      300
aggatggttc agaggaggtg tgtttatcta tcgatcatcc tcagaaggtc ttaattatgg
                                                                      360
gtgaagetet tgaeetggga acetgtaaag ecaagaagaa gaatggagag eegtgeaege
                                                                      420
agactgtgaa tttgcgtgac tgtgagtact gtcagtacca tgtccaggct cagtacaaga
                                                                      480
ageteagege aaagegtgeg gatetgeagt ceacettete tggaggaega attecaaaga .
                                                                      540
agtttgcccg cagaggcacc agcctcaaag aacggctgtg ccaagatggc ttttactacg
                                                                     600
gaggggtttc ttctgcctcg tatgcagctt caattgcagc agctgtggct cctaagaaga
                                                                      660
agattcaaac cactctgagt aatctggttg ttaagggcac aaacttgatc atccaggaaa
                                                                      720
cacggcaaaa actcggaata ccccagaaga gcctgtcttg ctctgaggag ttcaaggaac
                                                                      780
tgatggacct gccgacgtgt ggagccagga acttaaaaca acatttaqcc aaaqccacaq
                                                                      840
cttcagggat tatggggagc ccaaaaccag ccatcaagtc catctcggcc tcagcactct
                                                                      900
tgaagcaaca gaagcagcgg atgttggaga tgaggagaag gaaatcaqaa qaaatacaqa
                                                                      960
agegatttet geagagetea agtgaagttg agageeeage tgtgeeatet teateaagae
                                                                     1020
agccccctgc tcagcctcca cggacaggat ccgagttccc caggctggag ggagccccgg
                                                                     1080
ccacaatgac gcccaagctg gggcgaggtg tcttggaagg agatgatgtt ctctttatg
                                                                     1140
atgagtcacc accaccaaga ccaaaactga gtgctttagc agaagccaaa aagttagctg
                                                                     1200
ctatcaccaa attaagggca aaaggccagg ttcttacaaa aacaaaccca aacagcatta
                                                                     1260
agaagaaaca aaaggaccct caggacatcc tggaggtgaa ggaacgtgta gaaaaaaaca
                                                                     1320
ccatgttttc ttctcaagct gaggatgaat tggagcctgc caggaaaaaa aggagagaac
                                                                     1380
aacttgoota totggaattt gaggaattto agaaaatoot aaaagcaaaa toaaaacaca
                                                                     1440
cagggcatec tgaaagagge cgaggetgag atgeaggage getaetttga gecaetggtg
                                                                     1500
aaaaaaaaa
                                                                     1510
```

```
<210> 5443
<211> 3004
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2227)...(1995)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5443 60 tgtgcagtca gccgtcggca ggttgatggg tccagagtct gtggtgacag ataatttgta 120 aacaccaggt gtttccatca gaactgacat gegggteett cagtgaaget tetagtgeet 180 etgteagtgg aagagaeage aagaceaagt tetteeageg tetgtggeet teteetetag 240 gtttcacctg catgtcaggt atcatttcca attttccttt gtttcagttc tggagcttct 300 gagecaggee titeteaace accieteetg eigetgaaac ggggatggeg tittecetet 360 ccctgtcctg gactggggtc agactgtgcc ccgaggagaa gcagcagaga ataggactac 420 gtcatgggca tttcgtccac ttatttgggt attttggggg ccacagaaca atcctgacta 480 tectagacte etcagagace teagaggeag etgtgaatgt cectatgttg eegggagtte 540 ctgtttgaaa tatttgaagc atagaggatg ccacaagctg actttcttca tctaccttgg 600 tgatettgaa geaaagaaca gaactgatge teaggeeagg eteacetgta geettaegee 660 gcaagcatac gtgaggcgcc agctctgtcg ctgaaggagc gcttactcaq aqqaqcqqtc 720 ggccccctct tggtgttaag gtctcttagt taacctggct ttttggtgca ggtgtgatct 780 ttgaagetea ggeaggteee tgatgeeate etaaggtgag gacaggaace teacceacea 840 tettettage gtgteeetga tgaetetgte etetgttaga tggtegttgt gettetgagt 900 aaaagtacaa coogactoog ttototocoo ttootgoago agagotgggt cottoootgg 960 tggccgagtc tctcttgcct tagcttcttt ggtcaaagtt ggagaaaagc ttcctgctat 1020 tagtgetgtt acagaacttg acggtttgtg gatgtgagtg tgaatgteec tgtgttettg 1080 ggataacaag agcetttatg ceaattatge actgaactet gtgtageetg gtaatgttta 1140 tetgtteatt tgataatget gattttagtg tgttgeeece etceeeegt taatgtgtgt 1200tgatggtgaa gtccttttga taatgctgat tttggtgtgc tgcctcccc ttccccccg 1260 ttaatgtgtg tgttgacagt gaagteettg ggtggggeea tgtgtgtgtt tgtgatgtte 1320 cttaagttga tgcagcttct aacctctgtg aaaacactgg tcagagtggc ttctccaaga 1380 getggeaget etgtgaacta aageetgeat catttttgtt etgggattga attetgeeca 1440 tgggcatgtc ttctcatagt tgcttgctgg taggaaagaa atgggcgtgg gtgctgccct 1500 ggaagetgag eggaaagttg eetgtggttg gtggaagetg atgagagett gagetggegg 1560 taagaaggag teteceaggg aagtgggaga ggeattaagg tgatggeeag ggetgagget 1620 ccaccagegt gagagggaac atgtgggaac tggcccctgc ccttgattcc tctgcctcaa 1680 agttgggatc tgaaagccat gtagggctag aagaccctga ggctgttctc ccttctgttc 1740 atagtgagac tcaaaaagcc aagtcccaga agttctgaag ggctgtgact agaagtgccc 1800 aggteettea gggagettta agaatgacce cacagaacte aagtttaact aggggttagg 1860 teccagatte agacecagga gtttataaaa atgageteta ettecagttt tggtttaaat 1920 tacacateca ggccaggcac agtggctcac acetgtaate ccagcacttt gggaggccag 1980 tgcgggcgga tcatgaggtc aggagtttga gaccagcctg gccaatgtgg tgaaaccctg 2040 tetettecaa aaatacaaaa attagetggg egtggtggca caegeetgta ateecageta 2100 cttgggaggc tgaggcagga gaatcgcttg aacctgggag gcagaggttg cagtgagccg 2160 agattgegee accgeactee agectgggtg acagagtgag acteegtete aaaaaacaaa 2220 aaggtgacac atccagctet ttetecaggt caetgegetg gaggacagat gtgeegtett 2280 gtcctgcctg tttcacatca gcataggatc aaaggatgac aatgctgaca gcttctgaag 2340 ccgaactcaa cagteteata ggeteeteae ttgteaetta ttttteeeta geteeeteaa 2400 cogcaccoca tecetttaga togtgogtet gttttagtga etetgacacg atgeogteet 2460 caccttccaa atacccagtt atttattcaa gaggggggaa gtgggtagag gatgggatgt 2520 tttggaagca ctttgcaagt taccactate tgaaaateee etgetgttge ggggagaage 2580 tttgaatgca ctgaagagaa ttccttctaa atgaaggcag gtgatagtgt tctttctgta 2640 agtaaaggga aagaaaaaa acatagtttg cttaccaggt ggagacaaga ttcaagacat 2700 agcagaagag tggaagacaa atattttcca cttaaatgag gctgtttttg acgttctctg 2760 ccaaggattt agagettteg ttgaactaac ataaaaggag tgcgagtett agtagagatg 2820 ttccgtgtgt gccgccgtg ctctgaactg cgtttccacc tgctgtggtg cttgtgcagc 2880 ctggcagttc attgtcatct ttaataaact aaggaaataa aattctgtct ttcgtcagcc 2940 tgeettgaet gteaagaaat ggeatgtgte caetgtaaag caggtatate tgaacattga 3000 gaag 3004

```
<210> 5444
<211> 384
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(352)
<223> similar to gi4512282 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

# <400> 5444 tttcgtctta gctgggtttt ccttgttgct attttaaaag gtgtccaatg tgaggagcag 60 ctggtggagt ctgggggaac cttggtacag ccagggcggt ccctgagact ctcctgtaca 120 gcctctggat tcacgtttgg tgattatgct atgagctggt tccgccaggc tccagggaag 180 gggctggaat gggtaggttt cattagaagc aaaccttacg gtgggacagc agaatacgcc 240 gcgtctgtga aaggcagatt cagcatctca agagatgact ccaaaagcag tgccttcctt 300 caaatgaaca acctaaaagc cgaagataca gccatgtatt actgtactag atctaagaga 360 tttctggctt accactttga ctcc

```
<210> 5445
<211> 798
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(799)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (216)...(501)
<223> similar to gi1616675 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 5445 tttcgtggaa ttacgcccga gtggagagtg tggaccgtga gtgtgggtat cagggagggc 60 tggatggagg cctgtgggtg ggtgaactgc gtcctcctag ctcagccccc aggaagctga 120 aagcccacga ggaaaaaatg tgggtgtcac tgggcaagat ggggataata ggaggcccat 180 gcaggaggca caagagccca accaactgtc ccatttttgc cctgaccttt gccctggtag 240 tectggeett tecegeetae etgetgggea ttgacagegg gegaetgeag gagaagetga 300 ccagccgcaa gatggacagc cgctggggcg ggcgcagcga qtccatcaat qtqaccctca 360 acgtggagca ggcagcctac acccgtgatg ccctggccaa ggggctctat gcccgcctct 420 tegaetteet egtggaggeg agtggggetg gggetggaag geagagtgga tgetetgggg 480

```
tcacaaacat ttatggaage tgagtgcagt ggctcacgge tgcaatccca atgccttggg 540 tggctgagtt gggagcattc tttgaggcca gaagttcaag accagcctgg gcaacatage 600 aagacccca tctctacaga aatttcaaat tagctgggtg tagtggtgtg catgtgcagt 660 tccggctact cagagggctg aggttggggg atcacttgaa cccaggaggt tggggctgca 720 gtaagctatg aatgcgctat tgtactccag cctggacgaa atcgtcgace cggccattgn 780 nnnncggtcc ggcaggcg
```

```
<210> 5446
<211> 1173
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (27)...(444)
<223> similar to gi2746866 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 5446 60 gagcatetgt etecaggaac gtggteacte acctgtgetg ggteeceaga, gaaccataca 120 tactacagac ctctgaagat aaaaccctca gattatggga cagtcggggg ctgcaggtag 180 cteatatgtt teetgeaaag cageacatte agaeetactg tgaagteagt gtggatggae 240 acaagtgtat ctcctgcagc aatggctttg gaggagaagg ctgtgaagcc acgttgtggg 300 acctaagaca gactegaaac agaatatgtg agtataaggg gcatttccag actgtcqcat 360 cotgogtott totaccaaga goattggcot tgatgcottt aattgctacc tcatcacatg 420 attgcaaggt gaagatttgg aaccaagata ctggagcctg ccttttcacc ttgtctctgg 480 atggatcagg accettgact tetetggetg ttggtgacge cateteetta ttgtgtgcaa 540 gttttaacag aggaattcac ttactcagaa tggaccacag ccaagggctg gaactgcagg 600 aagtggcagc attotgaggc caagagacac toactggaca atatcaaacc atggctcctc 660 ctcagcatgg ctttgtgtct ttcccagtta tcttgagggg agtgggatgt agggctggta 720 ttctttgctt aggttcattt acaagatgta tcagtgttgt aagtccaata atttaagtcc 780 agtgattcaa aatcaggtat agagtccaga aacatggact acacataagg ttctctattt. 840 aagttaaata caaatgcaac tttttagtga gcttttagga ctactcttca aaaaaagtgt 900 attgctcaga atgatgacct gtaaatgtaa gagtggcagg cctctgtctg tgaaagtcag 960 aacacagggc tcgagcctct ggaactgacc ctttgcaagt ctttacaaaa gaaaaaaggc 1020 agtggggaga gagagtgttt tggttacatc aggaaataat tgagatggga aagaatagtg 1080 cagetecata gaggagaegg actgtagaea atgagattaa getteagtea etgetettea 1140 gcaatgtgaa gaatcaaagt cagggcctgt att 1173

```
<210> 5447
<211> 463
<212> DNA
<213> Homo sapiens
```

<220>

<221> misc\_feature <222> (13)...(362) <223> similar to gi15061 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

### <400> 5447 ctegetgeag gaataegeee ggeatttege gggegatatt tteacageta ttteaggagt tcagccatga acgcttatta cattcaggat cgtcttgagg ctcagagctg ggcgcgtcac 120 taccagcage tegecegtga agagaaagag geagaactgg cagaegacat ggaaaaaagge 180 ctgcccage acctgtttga atcgctatgc atcgatcatt tgcaacgcca cggggccage 240 aaaaaatcca ttacccgtgc gtttgatgac gatgttgagt ttcaggagcg catggcagaa 300 cacateeggt acatggttga aaccattget caccaceagg ttgatattga tteagaggta 360 taaaacgaat gagtactgca ctcgcaacgc tggctgggaa gctggctgaa cgtgtcggca 420 tggattctgt cgacccacag gaactgatca ccactcttcg ccc 463

<210> 5448
<211> 862
<212> DNA
<213> Homo sapiens

<220>
<221> misc\_feature
<222> (863)...(523)
<223> similar to gi4490653 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters

```
<400> 5448
tttttcacac atgcagggag ttgtattaca ggaggggtaa cactgagctc agggactcca
                                                                       60
etgettttat ageaaacagt aageaagett getetetgte etgatgggag acateceate
                                                                      120
atttttcaag gttgcttgct gcaacataac cctgagaaat gtcttggata aagagtggtg
                                                                      180
agageettge attettggea taettageaa ggtgtgtagg agtacaagag cetcacagaa
                                                                      240
aggageetee caatagatat getetgtgaa atgateagtg eteteteatt eeatgeegat
                                                                      300
gaccaacact tattaaaaaa cagttgatca agtaattcca gtgaaagaag aggatctctg
                                                                      360
gaagtaataa aaattgctcc cttaattcat tcttctttt tagtgccttc tgtctagtgt
                                                                      420
tttttcaacc ataaaatatt ttttctttag gctcttcaat tttcttctaa aataataaaa
                                                                      480
ttgtctttca tgggcctctg atgacttaac ttccttttt tcttaggtag tctcccagge
                                                                      540
tetetgtgge ttecacacag atgetaggat acatgecete agtgtaagtt getaccagaa
                                                                      600
gatacagatg ggtcttcacg acaaccacac cagtgttctc atttttqqca taaaqaqaat
                                                                      660
atteatetge ceggacacat etgtaatett tteeettgaa atacagteet tetetteggg
                                                                      720
cttgcaaagg gttcttggca aatccattca ccagtgttcg gacatcactg ggcgttacat
                                                                      780
tgaaacctgg tgatgctaca cacaagctcc gctcctggat tttgatgagg gctgcactgt
                                                                      840
ccacatgctt ggttcccaag ag
                                                                      862
```

```
<210> 5449
<211> 502
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (505)...(57)
<223> similar to gi145908 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 5449 caggaattta gttgccgttc ttcccgcctg tcaggggcgg gtttttttat.atctcagata 60 aatgcaaacg catcgccaaa caggcgatct tcccgcgcat tacgctcact gcaaaacaga 120 tegegggeaa tittegeeat eteaaaaegt eeggeaatat agatateatg etetgeeage 180 gtaccgtgat cetgcaatac cgccgttaac acggtgccag tacgcccacg ccagcccgct 240 tccggttgtt caaccaccgg caccacttgc agaccaggat gcttcaacga aagcgcctca 300 agctegeaga gateatacag atgetgetet teaegeeege eecagtaaat ggtgatatea 360 eggtttgggt taegegeeaa egetgteage aaaategage gggeataaga gaaceeggtg 420 degeoogeaa teaaaateat eggaegetet teateatege geagecaege tteteegtgg 480 ggaatgtcga ccacgatttg at 502

```
<210> 5450
<211> 2873
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (305)...(1555)
<223> similar to gi468355 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5450
teetgeegeg eeggeageea caggetggea tageggetge egaeeegeee tegtteetee
                                                                       60
accecetgea egggaetget gggeeegeee egeeegeet geaggtgaag eggeegeage
                                                                      120
egeegagtag gtgegtgggg atgateteae-tegegegete egegeeagga ggaggaggag
                                                                      180
cgggagcgga tccaacttcc gggtagtgga gccgcaagcc accggcatct tgctttttct
                                                                      240
teccectect cetgtgtgee eegegeeget ceetetttee ettttattee eggeeeeace
                                                                      300
cgccaaaatg aacagctcgg acgaagagaa gcagctgcag ctcattacca gtctgaagga
                                                                      360
gcaagcaata ggcgaatatg aagaccttag agcagagaac cagaaaacaa aggagaagtg
                                                                      420
tgacaaaatt aggcaagaac gagatgaagc cgttaaaaaa ctggaagaat ttcagaaaat
                                                                      480
tteteacatg gteatagagg aagttaattt catgeagaac catettgaaa tagagaagae
                                                                      540
ttgtcgagaa agtgctgaag ctttggcaac aaagctaaat aaagaaaata aaacgttgaa
                                                                      600
aagaatcagc atgttgtaca tggccaagct gggaccagat gtaataactg aagagataaa
                                                                      660
cattgatgat gaagattcga ctacagacac agacggtgcc gccgagactt gtgtctcagt
                                                                      720
acagtgtcag aagcaaatta aagaacttcg agatcaaatt gtatctgttc aggaggaaaa
                                                                      780
```

```
gaagatttta gccattgagc tggaaaatct caagagcaaa ctcgtagaag taattgaaga
                                                                      840
                                                                      900
agtaaataaa gttaaacaag aaaagactgt tttaaattca gaagttcttg aacagagaaa
                                                                      960
agtcttagaa aaatgcaata gagtgtccat gttagctgta gaagagtatg aggagatgca
agtaaacctq gagctggaqa aggaccttcg aaagaaagca gagtcatttg cacaagagat
                                                                     1020
gttcattgag caaaacaagc taaagagaca aagccacctt ctgctgcaga gctccatccc
                                                                     1080
tgatcagcag cttttgaaag ctttagacga aaatgcaaaa ctcacccagc aacttgaaga
                                                                     1140
agagagaatt cagcatcaac aaaaggtcaa agaattagaa gagcaactag aaaatgaaac
                                                                     1200
actocacaaa gaaatacaca acotoaaaca goaactggag ottotagagg aagataaaaa
                                                                     1260
ggaattggaa ttgaaatatc agaattctga agagaaagcc agaaatttaa agcactctgt
                                                                     1320
tgatgaacte cagaaacgag tgaaccagte tgagaattea gtacetecae cacetectee
                                                                     1380
tecaccacca ettecedete daceteceaa tectateega teceteatgt ecatgateeg
                                                                     1440
gaaacgatcc caccccagtg gcagtggtgc taagaaagaa aaggcaactc aaccagaaac
                                                                     1500
aactgaagaa gtcacagatc taaagaggca agcagttgaa gagatgatgg atagaattaa
                                                                     1560
aaagggagtt catcttagac ccgttaatca gacagccaga ccgaagacaa agccagaatc
                                                                     1620
ttcgaaaggc tgcgaaagtg cagtggatga actaaaagga atactggcct cccagtagca
                                                                     1680
ttggatgcag gaaaaaatac attgacggtg aaaaacaagc cgaaccagtt gtagttttag
                                                                     1740
atcctgtttc tacacatgaa ccccaaacca aagaccaggt tgctgaaaaa gatccaactc
                                                                     1800
aacacaagga ggatgaaggc gaaattcaac cagaaaacaa agaagacagc attgaaaacg
                                                                     1860
tgagagagac agacagetee aactgetgat ecataaacca gaageetgae atgtttggaa
                                                                     1920
gtccttttca ataagcacat gattagtgtt gttatattgg caagggctgt aaacattctg
                                                                     1980
etetggteae tgtatteaga atacaggtte ttttetggtg teaettttgt aagtageaae
                                                                     2040
tataaacata agtaagctgt ttagcaaaac acacattcct agtaggtttt ggttttttga
                                                                     2100
tetttataaa gatgaggttt tttteetagt taetgtatta agtatgaett ettttagaag
                                                                     2160
gttacaaaaa aattcagatg ttgatacctt tttaggaaat gtgcatacca ctcatcaaat
                                                                     2220
ggaatgctga aagtttgagg tgcttgtata taatcggata aacaaaactg atcaacccaa
                                                                     2280
tgtgatttta aaagccccca aagaagcttc tgttttgggt ctgatcctct tgatggagaa
                                                                     2340
actgcagcag catggaaatt gttgggtact gtggcataca agttattttc tacagtagac
                                                                     2400
tgagataaac tgaaaactca ggagctggca tcaaactcgt agtcccatag tcagtgttaa
                                                                     2460
ttacacacat tgttaactat tggatgaaaa atacatgcta ttgattgtgt ccaaagcctc
                                                                     2520
ccgaggacct ccgtggggat gctctggtag cctgaataca gaactgaggt gaaaqtccaa
                                                                     2580
accttgaatt ttacagtagt aagttggtaa accatgtgct ctgtgctatg agttaattat
                                                                     2640
gttttcccaa atactaatgt ggcacaagta ccatatttta tcagagttct tatgtacagt
                                                                     2700
atggtgaaga taagtgacaa gcacacattt ttcttgcttc actgctqttc tatattacac
                                                                     2760
aggtttgttg ttgttttttt taaaaaagaa attaagcagt agttagtctc taaaaataca
                                                                     2820
atgtttcagg ctaccacagt gaataaatag aaatgtaatc agggattaaa aaa
                                                                     2873
```

```
<210> 5451
<211> 1809
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1681)...(562)
<223> similar to gi442368 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5451
caacacgcgg gcgataagtt tgtttctttt aaacggcgcc cccttttttt tttttttgtg 60
gattttcctt ttaatgcaaa atgttgcaat acaaaacaat gtggagaaag tcctgttcct 120
```

```
180
caggacactg aagggaggag tgaggaagag aggacagagc tggacgtctc ctcctatttc
tecetececa agteactetg aggggaagaa caetgetgee tgeteeetgg geetgeeege
                                                                      240
atacaaggtt agagccctgg gtctggggca tccttagcct gaaatttgtt gacatggggc
                                                                      300
aggagagcag gagggaacat tgagggtttt gactettegg getetaaaag gattaeteag
                                                                      360
gatctggagt tccgtatgaa acaaaggagc tgaaagaatt tgattgccat tggctaaaaa
                                                                      420
tatagaggat ttgagccaca actggcccac atttgaagaa tgaggaacaa gaaatttagt
                                                                      480
ggggatataa tataaatgta tgggagtgag aaagatgcaa aaaacaaggc tagctcctca
                                                                      540
aacctcctcc tctttcttcc tcatctccag cttatagaca atctggtagc catcatccca
                                                                      600
                                                                      660
ggcatagage tggcgttctc gggggttata gcggaggetg gcatgggcac catatetgcg
gggaaaataa gggagtgctg cccgttcagg ggtcagggtg ccgctggcat caaaggagca
                                                                      720
                                                                      780
ctggatgegg geeegactgg eaggacgggt gttatagaeg acatagaggg teceacagat
                                                                      840
gacaaaggca gcctcagcat tctctctggg acatggtgtg tcccactgct gctctgtgtc
cagtgtctgt ggatctaact tggccagaca caagtgcctg tcatcctccc gggtggcata
                                                                      900
gacageceaa agacetteet cateagetge caggtegatg taggtgtetg etgteaagee
                                                                      960
                                                                     1020
gtagggggg atcagcccct ctgctgggaa tactgagctg tccaccactg ttcggtttgc
caggtggaat ttgattaget gcaaagtgtt etceatetea ceaceteeae caggtettee
                                                                     1080
aggaggeete egageaaaat aaagaaagee accatatace agetgeeetg tgeetaeeea
                                                                     1140
ggggaaggge acceggaete gggaagettt cegggeagee atggeaaggg tgaagteaeg
                                                                     1200
cageettggg aagacaaagg etgtgteatt etgtgteeca tetaacaegt agatettete
                                                                     1260
tgtttgcccc agtggatcct tggtccatag accagetggg ccaccaaatc gettcagaat
                                                                     1320
cttcattgat ctcacttgag agattgtgta gccacagtct gtcaccatat cgtacttctc
                                                                     1380
attecttett ceettgeett tggteecagg geetecagte acetteteat caaactetae
                                                                     1440
acagggcaga gctgggttct gggtctccag atagtctacc tcccgctcca gacgatccac
                                                                     1500
teteceggag atggtgtegg ceteagitet gagtgeetee egeteettet etgecacete
                                                                     1560
cagcagtggc agcatcttgt tettgaagte cegeagetea geageatgee gactactetg
                                                                     1620
gteetggeae tgggeeagee gtteetetaa ageagetagt eggegtteea tgtaeteeae
                                                                     1680
aaggtggtgc tgctgtcctt ggaggggtcc cgaccatgac aaaaggaaca agatgaggag
                                                                     1740
aggggtgctg ggccccatgg cagcctggag agtggtgcca gagtagaagg aacgtacagt
                                                                     1800
cagcctctt
                                                                     1809
```

```
<210> 5452
<211> 587
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1) . . (588)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (587) . . (109)
<223> similar to gi567205 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5452
ttttttttt ttattgacat ttcgatctaa gtggtcataa accagatagg tagttttatt 60
aaaagattta ccctaagaac actccttcta ttcccatttc tgacatccta cccacaccca 120
cattcatcga ctaccatgtc ttcataatgt cgtagaatga cattgtcatt attgtcctgg 180
```

```
tagagcatgg aaatgggaga cagcttggtg gggatacaca cagcctgggg gatctctggg 240 tcaacggcat gcatcagggc ttgcatgaaa gcataattgg agctgttgag agagatggtc 300 agtgagaagg gacactctcc atggcagtaa tttgccatga accccttggg ggcaatgatc 360 cacttgtgcc aacccaggtc ccggaagtta atgaatagct ggtgacggtg gcagaggttc 420 ttacaaggata gagtcaccac cagcagggaa gcatgaaggg agcatcttag gtggcactga 480 gtgtcttcag gctgaaaatt cacccctgag tcncnatctt ctttgac 587
```

```
<210> 5453
<211> 598
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (601)...(87)
<223> similar to gi1651355 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

### <400> 5453 ctacacgacg gtattcattt aggcggaacc atcctccatg tgcgtatcgc cagcggcgtt 60 gatatgggtc agttgcacaa tacttatttc ttcaaatgtg gatggaaatt acacggacgc 120 gtacgggcat ccagctgcgg cgcgatgata ttttcccatq cqqtacqqca cqctttqqtc 180 gaacceggca tggcgaaaat cagegttttg ttggcgacge cegetacege acgagattge 240 aacgtggaag tgccaatctc ttcaaacgac aacatccgga acacttcacc aaaaccttca 300 acttcacggt cgaacaacgg cagcaatgct tcgggagcct gatcaccttc cgtcaqqcca 360 gtaccacceg taatcaatac cacttgtaca tegtegetgg egatecaege agatacetga 420 gegegaatag egtageggtt ttettteaea atggetttat egacaaegtg atggeeeget 480 tettgegeeg aategegeag atagtgaceg gaggtategt ettetteace gegacgatta 540 gaaaccgtaa gaatagcaat acgggtcggg ataaattcag tgcttacctg actcatct 598

```
<211> 454
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)...(179)
<223> similar to gi2367275 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5454

<210> 5454

```
tgcggtctgc ctggtgaaat aaaacaacaa ctggaagagc ttgaaagcga ctggcgcaag
                                                                       60
caacacgctt tattcagcga acagcaaaaa tgtctgttta tccctggcga ctggttaggt
                                                                      120
cgcattgaag ccagcctaca ggatgtcggt gcacagattc gccaggcaca acaatgctaa
                                                                      180
cgctggatac gcttaatgtg atgctggccg tcagcgaaga gggattgatc gaagagatga
                                                                      240
teategeact getggeetea eegeagetgg eggtettett tgaaaaatte eeaegeetga
                                                                      300
aggeggeaat caetgatgat gtteeceget ggegtgaage getgegeagt eggetgaaag
                                                                      360
atgecegagt ecegeeggaa eteacegaag aggtgatgtg etateageaa agecagetee
                                                                      420
tctccacgcc acagtttatt gtgcagctac caca
                                                                      454
```

```
<210> 5455
<211> 2177
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1577)...(813)

<223> similar to gi2736345 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5455
ttttttttt ttaaatacaa atgttttatt acgcaaacca catgtaggtc ccaggctcag
                                                                       60
gggettacce tacagecede actggteect ggetecaage etgeteettg ecettgeeca
                                                                      120
ccctggaaag ccaggatete ctatggagtg tgtaggtgte cacgagtgta ccggtgtgcg
                                                                      180
ggcctcctgg gctgcaggca ctcaggcatg gtggcagcat tgagggaaag acaggtgttg
                                                                      240
gggagcgggg tececacetg eccaggetea ggagteacag gggtetgeac agteetttet
                                                                      300
gctgtggaac acgtgataga tgctggtcgg ggggaacata gcaacagcgc cgagcagaga
                                                                      360
geccaeetgg atggecaege eggetgecag caatgeegge eggeceeege catgeageag
                                                                      420
ggagetgget gecacettea egtaggagaa caegecaaga caeageacee acgaeageae
                                                                      480
cacgaggacc accccgccg aggtgcccac caggggcggg caggggctca ggactgccag
                                                                      540
egecateagg tageececae agaadaegee cageagagag aggeegeeca geeetgeeaa
                                                                      600
ggacctgcac agcacacca tggccaggaa gcaggccagg ggattggcag cactgccag
                                                                      660:
caccacagec aggtggtagg ccagacgece gtagggtaag caggaaaage tetgcacgge
                                                                      720
aggcagcacg ccattggtca gcgcgttggt ggcggccaac aggcccagca ggcaggcact
                                                                      780
gegggetgat agaagetgat aggeettagg gtetggacea ggggtggtge etgetgeetg
                                                                      840
gettggtgge tettgeagtg gtgaggaete ttedaeetet teetetgete etggggetee
                                                                      900
cacctggagg cctgatccta actocctgt gggtacagat ggtggtggcg gcaacagcag
                                                                      960
cagaagaccc tggaaggcag cagctgaagc gaccagaagg gcagtcagtg cccagaagaa
                                                                     1020
ggtgctggcg ggaaaacgct caaggaagtc gagcgggggg ccaggggtgc cgttgatggg
                                                                     1080
ggctggcggg cactcgaggc ggcccacacc ctgcactagg gccagcacgc agggcagcag
                                                                     1140
ggcactcagg cottgaccca ggaagaatga cogtaagaag cgaggtggca ggtggctcaa
                                                                     1200
gaagggcagg aaagtgacat togaggcaca gcatgccagt gccagcacaa aggccagtgc
                                                                     1260
taagaaggee acagaatgea actgteetge caetggggee acatggtgee acagagagge
                                                                     1320
cagcaggget gtgcccacca tgcccagcac etgcaccacc eggatgggga cetgetegte
                                                                     1380
ctttcctggg gccagcctcc tccagagggt caccaccagc agacccaggt tccccagagc
                                                                     1440
cacaagcaca gagacgtaag aggggagget ccaaccetet ggaagetett tgaccaccac
                                                                     1500
aggtagetee acceagatee cattgacege ageceaggag eccatgeega agagageeae
                                                                     1560
cagcaggtgg gtcagcaccg gacgggcggg cgtgggtgct gccattcagc ccaaggctgg
                                                                     1620
gcccttccag gtcagggcaa aggtcacagc cagttctttt cccacctagg gccagacacg
                                                                     1680
ctttggctct cctgggaagt gaagactttt tctagccagc gggaccgccg gcaggcaggg
                                                                     1740
```

```
aagcaggaaq ccggcccgag tcgctgcggc cccaggggag gaggccgaag gagcgagtgg
                                                                     1800
agccctcctc tccagggaga ggcggggctg gagtcaacgc caccaccacc ccaagccgga
                                                                     1860
cqccgggaaa qqgcgcctac caqqaggagc cacgcacacc ccagggcttc acqqtgcccg
                                                                     1920
cqaccgcaaq aqccaagtca qatcccaggg gagtggccgg gacggctctg ctcggagggg
                                                                     1980
egecgecete teggtacegt caggtgggeg actegggage egteeggtee etgegeetee
                                                                     2040
eggteeegeg eecagtgege teeegeteea gtgeeggett eeegeeaege egggaeaeeg
                                                                     2100
ccgtccggcc cagggacgcc acctcagtcc ggagcgcgca ggacccggca gcagccacga
                                                                     2160
cccgactcac ccgtggc
                                                                     2177
```

```
<210> 5456
<211> 1228
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (19)...(1004)
<223> similar to gi3327222 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5456 ctgcaggatt cggcacgaga atacagcgag ctcctggaca aggcttcgga aactgatgat 60 ccatatgage geatggttet egttgeegea tttgeagttt caggatactg etecacetat 120 ttcagagcag gaagtaagcc attcaaccca gtccttgggg agacttatga atgcattaga 180 gaagacaagg gatteegett ttteteagaa caggttagee ateateeaee catttetgee 240 tgtcactgtg aatcaaagaa ttttgtgttt tggcaagata tcagatggaa aaacaagttc 300 tgggggaagt cgatggaaat cctgcctgtt ggaacactga atgtcatgct tccaaagtät 360 ggagattact atgtgtggaa taaagtcacc acttgcatac acaacatcct cagtgggaga 420 agatggatag aacattatgg agaagtaacc atcagaaata ccaaaagcag tgtttgcatt 480 tgcaaactca catttgtcaa ggtgaattat tggaattcta acatgaatga agtccagggg 540 gtggtgatag atcaggaggg gaaggcggtg taccggctgt ttggaaagtg gcatgaagga 600 ctctactgtg gtgtggcccc ctctgcaaag tgcatttgga gaccaggttc catgccaaca 660 aactatgage tgtactatgg etteacaagg tttgetattg ageteaatga gttagateea 720 gtactaaaag atctccttcc accaacagac gcccggttcc ggccagatca aagatttttg 780 gaagaaggaa atttagaagc tgcagcatca gagaagcaaa gagtagagga actccagaga 840 tctcggagac gatatatgga agaaaacaat cttgaacata taccaaaatt ttttaaaaaa 900 gttattgatg ccaatcaaag agaagcctgg gtttctaacg acacctactg ggagcttcga 960 aaggaccctg ggtttagcaa agtagacagc cctgttcttt ggtagactgg gaatgtagag 1020 ctagccaaca tatcacattc tgaatgaata aataactatg cacaattatg tttcttatag 1080 ctatgtgtgg tttctgggtc-gactgaaaac ctaccatttg cttttctatt catctttata 1140 atggaettte agaagtgeat tagacaagge cectaaceae tttgggatee tttetqtttt 1200 gctgcaacca tattccttaa aaaaaaaa 1228

```
<210> 5457
<211> 1833
<212> DNA
```

## <220> <221> misc\_feature <222> (1834)...(943) <223> similar to gi4680693 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

```
<400> 5457
qtaatgatgc tacctgtcat ttctgagact ggtttgtgtc tttcgtgttt ttttctgatc
                                                                    60
tgtctggcta gaggtttacc aattgatttg attttcctca aacttctggt tacaatgatt
                                                                   120
ctctctctct ctcttttcct gattatatta atttctgttc tgatctttgt ttcctttctt .
                                                                   180
ctgcttactg gattttattt gctctttttc tggtttctta ctgtaaaggc agaagtcatt
                                                                   240
gatttgcatt gatttgagac ttetttteta atgtaggeag taagtggtgt aaatteeett
                                                                   300
ttagtatgac tttagtggca tctcacattg atatgttttc aatttcattc agtttatttt
                                                                   360
420
ttacgcaact caaaatagaa gcgtatctgt tgtacaacat gggtagtaat tgactataac
                                                                   480
tggagattta ttatattcta atacagatca tttataaatg caatttcttt attaaaaagc -
                                                                   540
ttccaccttt ttgtttgttt gtgtacaatt tgcaaaacta ttctgaaagc ggaatatatg
                                                                   600
tgcacaagtc tgcaaagagt gcaaatttag gatatggtaa atgctttaca agttactttc
                                                                   660
aaaaaactgt ctgccacaac tgagccttta cattgtcatc ttttttgatc aaaatatttt
                                                                   720
gatgccagcc ttccttccac tgccctaaac tataaagcat tttttaatga gttgaaatta
                                                                   780
aggaaggact acccctacta gaaaaaaaga gaagaaagtt ctattagttt gaggtttcag
                                                                   840
aatecceeca aaceaggace agtategtgg taaaggetag getgggacee eggacagagt
                                                                   900
atgagaatgt gcaggtggca tccctgagga ttcagagctt cagtggaccg tgagtgctcc
                                                                   960
agetgeataa eteaetgaae tgtettgeea gtttetaeae tggetegaet gggeataatt
                                                                  1020
caaaaacgaa aaactcatat tcattccatt cttctggagc tctgtgatag catttaataa
                                                                   1080
caccccaatg ggatgtette cacatatagt attatggtat ttettcaagt aattgetaaa
                                                                  1140
agatacaggg tctaattgtt ctataatact catacccatt ttatctagat gttcaatgga
                                                                  1200
totataaato tooccotggg attoatoata gtaactgtaa cggaaccttt gaccocaatg
                                                                  1260
gcagaaatca gaagaaacca caaagagatt actaggatcc gctagatatt tactgaagag
                                                                  1320
ttttccgaat tcctgttctt ttgactcact cagageteca accagtacag gaataatggt
                                                                  1380
aaactcatec ttatggcttt ccatggcttt agctgtataa ggcaaatgca tttcaatact
                                                                  1440
gtgttcatct tcatctgtct gcagagacat gcgttcaaac attcctgtct tccacagttc
                                                                  1500
teegtaaate tittggicaa taegaaggic ataeagaggi gieetatata taiceacaet
                                                                  1560
ggaaagtgca catcgagaga ggggcacatg atgagaaggc ccaaggatga aaattctccg
                                                                  1620
ggtaatagac ggatccactt gtttataagc atgggcagca caagacccac agtacgtata
                                                                  1680
tectgeatgg ggggeaataa tggetetage aggtettttt gtagaetgta ettgtgaaag
                                                                  1740
ccaaccttct agetgtgcat teagetgegg teetgagget gtgtaccage teeeggegtg
                                                                  1800
actggcttct cggcagacca ctcggttgga cat
                                                                  1833
```

```
<210> 5458
<211> 970
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (239)...(603)
<223> similar to gi399711 in the genepept database release 114,
```

## Run with FASTXY 3.3t00, default parameters

```
<400> 5458
ttgcggaatt cggcacgagg ccgactacaa cagattggag ccatggcttt ggaacagaac
                                                                       60
cagtcaacag attattatta tgaggaaaat gaaatgaatg gcacttatga ctacagtcaa
                                                                      120
tatgaactga tctgtatcaa agaagatgtc agagaatttg caaaagtttt cctccctgta
                                                                      180
ttcctcacaa tagttttcgt cattggactt gcaggcaatt ccatggtagt ggcaatttat
                                                                      240
gccaaacatt aaaatatete qaccectaaa agttetgete acagtegtta tagtttteat
                                                                      300
tgtcactcaa ctgccttata acattgtcaa gttctgccga gccatagaca tcatctactc
                                                                      360
cctgatcacc agctgcaaca tgagcaaacg catggacatc gccatccaag tcacagaaag
                                                                      420
categoacte titeacaget geeteaacce aateetitat gittitatgg gageateitt
                                                                      480
caaaaactac gttatgaaag tggccaagaa atatgggtcc tggagaagac agagacaaag
                                                                      540
tgtggaggag tttccttttg attctgaggg tcctacagag ccaaccagta cttttagcat
                                                                      600
ttaaagctca tccataataa ctccgggacg actgactaca caaggagaga atggtgattg
                                                                      660
gcatttacct gtcatacaga agcaagagca atcaaggcat agtccacgtg gctqaqtccq
                                                                      720
ctgacagetg gcaaaaacaa gttccagaga ccctcgactt tggccatttc ctgtcaaggt
                                                                      780
gatgaacatg ccagagtgac cataatttac caggactcac agtagtttat ttctttttt
                                                                      840
aaatattggt atttatgatc.tttgaaattt aaaaacactt atggagttat ttattttact
                                                                      900
gtatteteca gtgageaaaa ecaagttett attaatteat tataaateaa eagtttaaee
                                                                      960
attaaaaaaa
                                                                      970
```

```
<210> 5459
<211> 1329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (146)...(284)
<223> similar to gi6013425 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5459
tgcggacttc cgacgaggag gagggctggg tcgccagtgt gacaggagac tgcaaatccc
                                                                       60
ttttgtgaaa ggagaactgg tactttgcgt gaggttaaac ttcacaaacc gctgctcaga
                                                                      120
aatctgctat tttccttctc ttttaggact ttatggacag cagcctgcta accaagtcat
                                                                      180
cattcgagag -cgctatcgag- acaacgacag -cgacctggca -ctgggcatgc -tggcaggagc-
                                                                      240
agccacgggc atggccttag ggtctctatt ttgggtcttc taggggcctc aaggtcttga
                                                                      300
tgtgcatagc ttctgataac cctgtgtgca ataatatgat ttgcagggca tttctgtttg
                                                                      360
tgacaaaagt ttttaataat agttttaatc attcctttga aagtagtgat gtcataattg
                                                                      420
tactaatcca cataagtacc acagagaagg gtttgaactg tgctattttg ttcaaatgtt
                                                                      480
gacteteegg gggeactgge teatteeaag actgttettg tgeaactete agaatacett
                                                                      540
atttgagcat acctgttttg aaaggcattt tetttttaga gttaggtgta gtgettaagg
                                                                      600
gttaatttat tttcatgtta tgccagtaat atagtgttgt atgcctattg agtgattgtg
                                                                      660
gcaagaaaag ctacagcttc tttgcgttta actttttcaa accacagacc agaactggtt
                                                                      720
gcatgttact ttaggagttg tgggttggta ageteecagg taetteecqa qqetatqqtq
                                                                      780
tgagagecce egtectgece tetggggete cacaggecce tggcaaggee gatggeteag
                                                                      840
```

```
gatgatgqgg cacagecege etttgaacaa teatgettea gaaatetgee tgaeeetage
                                                                      900
                                                                      960
tgctgctgct ggctcacttt attcttgtat ggctttggta ggcatacttg gagaacatat
                                                                     1020
cccacattag ggaattgatt taagcctgag agtttgaggg ctttaatcct ttaaaacttg
gagaagetgg etgggeegeg ggtgeteaeg eetgtaatee eageaetttg agagaeegag
                                                                     1080
gccgggccgg atcacgaagg tcaggaagat cggagaccat cctggctaac acggtgaaac
                                                                     1140
cccatcttct actaaaaata caaaaaatta acctgggcgt ggtggcaagg cgcctgtggt
                                                                     1200
cccagctact cgggaggctg aggcaggaga atagtgtgaa cccaggaggc ggagcttgca
                                                                     1260
gtgagccaag atagtgccac tgcacttcag cctgggtgac agatgtgaga ctctgtctca
                                                                     1320
                                                                     1329
aaaaaaaa
```

```
<210> 5460
<211> 1916
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1917)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1614)...(1414)
<223> similar to gi4490420 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5460
ttttttttt ttgagcagga getgggeett tgagggeece tgetecaace ccaagetgea
                                                                       60
tttatgaaat aacccatcac aggtggattt taaaaatacc caaaaaaaaat atttaatata
                                                                      120
cattataaaa cctagggggg gtttggaggg ggcctgagcg atatgcaaac agggaggacc
                                                                      180
ttcaggaaag ctcgggccag ggtcggggat gaggaaggga aggggcacag tacttcatat
                                                                      240
gaaactcata aatacccaca ggtggctgct ggacaggccc agctggctct gggggcctgg
                                                                      300
gtgttaagaa gggacagcag gtgaagggtt aaccttcagt ccccagaaac tgggtctggg
                                                                      360
agetgetaet etaggeaggt agattgaggt ggggaagaac etaagggage agtgeeceae
                                                                      420
caagggtttg tcagattcaa gcctcaggca agagaaaaat caaaagcctt ctgctactct
                                                                      480
ctccctctgg gcctctggtc tgcccagagg ctgggactcc ttcctctacc ttqctctcaa
                                                                      540
tetggagggt getgggggt geceeatett eetggggeee etggetgget tgtgggetaa
                                                                      600
tgaggtgcta atggggtcta gtagctgctg tgctcccttc ttcatgccca gtctgaaaca
                                                                      660
ggtgetecce taacccageg ecectegatg aggetecact ecacactgea gagtetetee
                                                                      720
cctaccctgc ggccagcccc cgccccaggg aggtagtata aacctgggct ctggggacaa
                                                                      780
grageretgg atgagaacte cagetetgee caceteteet gtgggteeet caactteetg
                                                                      840
gageetggge actteatetg aaacceagag acetaegetg etgtgeggag tetgaggace
                                                                      900
acacaagcca tgcaaggagt ctgggcacca ggcctgggac acaaangggg caaggaagtg
                                                                      960
tgggcccctc tgtcctcagt ccaaccccaa ccggacactc ccagggcctc tgctcactga
                                                                     1020
ctcccttggt ctccatcctg ccctcacctg cccatcatgc tcccccaagg gtgggtgggg
                                                                     1080
gtacagtigge cacacatiget ggäggetgaa ggtigteeeet ateeecaëet etetgaggte
                                                                     1140
acgcgagget gggcagagca gggtgatggt gggtcagege cccggacagg ctgccccacc
                                                                     1200
gttgagccct cctctcctct cttctcccac aattaaagcg cagaacagtg gcagggagtg
                                                                     1260
tgtgtgctgg ggtaggtggg gaggcctcct gggtcctggg cctgaggcct ggcaggtaga
                                                                     1320
tgaatcetca atcetggace eccecagggg tgecaggeag gtgtggagag gagatgetca
                                                                     1380
```

```
ccctqcatcc ttaaqqaqqc gcagagggca ccctagtctt tgacgagctt gtagacatgg
                                                                    1440
tgctgggccc cgtgctcact ggtggagact tcgaagacaa aagcaatgac aagcagggtc
                                                                    1500
teetgggagt eeeggetegt gaccacetge aggatggtga agtteteeag caegetgtte
                                                                    1560
                                                                    1620
atcatgtact tetegggeag gtgetteage ttgtggatga agttgateat gtaaggagte
                                                                    1680
tgqqcaccag gcctgggaca caaaggggca aggaagtgtg ggcccctctg tcctcagtcc
aaccccgacc ggacactccc agggcctctg ctcactgact cccttggtct ccatcctgcc
ctcacctgcc catcatgctc ccccaagggt gggtgggggt acagtggcca cacatgctgg
                                                                    1800
aggetgaagg tgteecetat eeceacetet etgaggteae gegaggetgg geagageagg
                                                                    1860
gtgatggtgg gtcagcgccc cggacaggct gcctcgtgcc gaattcctgc agagcg
                                                                    1916
```

```
<210> 5461
<211> 414
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (53)...(128)
<223> similar to gi1763291 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5461
cccgcctgca ggaattcggc acgagccaaa actgaacttc taaaataact aggaaggact 60
cgagaaacta catgatatga taattaaaag gagaaaaatg ttgcggcaac agaaaaagaa 120
gagatgaatg gcagtacctt ttatattggt gtggaatagg ttttcctggg tctgatttct 180
gacaagctga agagtgtcta cagcctggtt tgcctgtctg ccctcatgga tgctattaaa 240
gctttgtttt gttgaacagt cagataccca actctgttgc cttgtggaag atgagtcaat 300
gcaatgcttc ttaaagtggt ctcttctccc tgacccacaa atcttttggt actaccattt 141
tgggaagtca aaaaaggcta gtaattgacc agaaaacaat tttgtggaaa tttg
```

```
<400> 5462
atcctgcttt cagagaactt aaggaaagat gtagaagctg taactggcag teetgctagt 60
```

```
cagacateca titgtatigg aattitacti agaagigeag aactiggetet titgeteeat
                                                                      120
ccagtggatc aagcaaatac tcttaagtct cctgtttctg aaagtgtgag cccagtggta
                                                                      180
cctgattatt tgcctacaga aaatggggat tttttgtctt caaaaagaaa acaaattagt
                                                                      240
agggatataa atagaattaq aagtgtaact gttaatcata tgtcagacaa cagatctatg
                                                                      300
agtgttgacc ttagccatat ccctttaaag gatcctttgc tttttaaatc agctagtgat
                                                                      360
acaaatctgc aaaaaggcat ttcttttatg gactatttat cagataaaca tttagggaaa
                                                                      420
ataagtgaag atgaaagtag tggacttgtt tacaaaagtg gctcaggaga aattggatca
                                                                      480
gaaacaagtg acaaaaagga ttcattttat acagattcaa gtagtgtctt aaactacaga
                                                                      540
gaagattega atataettte atttgatagt gatggtaate aaaacataet tteaagtaet
                                                                      600
ttaactagta aaggaaatga aaccatagag tccatcttta aagctgaaga tttgcttcca
                                                                      660
gaagcagett cactetetga aaacetggat atcagtaaag aagagaceee eecagttaga
                                                                      720
acacttaaat cacagtcatc tttaagtgga aagcctaagg aacgttgccc acccaacctg
                                                                      780
gctcctctct gtgtttctta taagaatatg aaaagaagct cttcacaaat gtcattggat
                                                                      840
accatttcac ttgacagcat gatattggaa gaacagttat tagaaagtga tggaagtgat
                                                                      900
agccatatgt ttttggaaaa aggaaataaa aagaactcaa ctacaaatta caggggcaca
                                                                      960
gcagaaagtg tgaatgctgg tgcaaaccta cagaattatg gtgaaacttc tccagatgcc
                                                                     1020
                                                                     1080
atcagtacaa attcagaggg tgctcaggaa aatcatgatg acctgatgtc cgttgtggta
tttaaaatta ctggtgttaa tggggaaatt gacatccgag gggaagatac agaaatctgt
                                                                     1140
cttcaagtga accaggtgac accagaccaa ttaggcaata tcagccttcg gcattacctt
                                                                     1200
tgtaatcgtc cagttggttc cgatcagaaa gctgtaattc attccaaatc ctctcctgag
                                                                     1260
atttetetga gatttgaaag tgggeetggt getgtaatae actetitaet tgeagaaaaa
                                                                     1320
aatggattte tgeagtgeea catagaaaac tteageactg agtttettae atettetett
                                                                     1380
atgaatattc aacatttttt ggaagatgaa actgttgcaa cagtaatgcc aatgaagata
                                                                     1440
caagtttcta acacgaaaat aaatttaaaa gatgatagtc cccggagtag tacagtatcc
                                                                     1500
cttgaaccag ctcctgtaac tgtacatatt gatcatcttg tggtagagag aagtgacgat
                                                                     1560
ggctcttttc atatcagaga ttctcacatg cttaacactg gaaatgattt gaaagaaaat
                                                                     1620
gtcaaaagcg attcagtgct gctgaccagt ggaaagtatg atctgaagaa acaacgcagt
                                                                     1680
gtcacgcaag ccactcagac aagcccaggg gttccttggc cttctcagtc agctaacttt
                                                                     1740
cetgagttet cetttgaett cactagggaa cageteatgg aagagaatga atetettaaa
                                                                     1800
caggaactgg ctaaagctaa aatggetett geagaggete aettggaaaa agatgetett
                                                                     1860
cttcatcata taaagaagat gacagttgaa tagcaggagt ggcagtcaaa actgaaatta
                                                                     1920
tagctctggg agtaggaagg ttatatttat aatgtggatg ttaccagtta ggggaagact
                                                                     1980
tttättttca tgaaaagaca ataaaacaaa atggaatgtg atgaagtggt gactatttca
                                                                     2040
aagccagttt agaaagtatt agtacgggca ttacaatctt ttggttgttt tgtgttttgg
                                                                     2100
ggcttaaccc tcttttaagc tgttgtgatc ctagggaagt caacacatag tgtaaaataa
                                                                     2160
ttaccatgcc ctaatgaaaa gaagatgtca tttcctaatt ttgatatctc attttcggca
                                                                     2220
ttttttaaaa tgtaaaagga aaacctcttg tgttcacaca gattgctgaa ttgatttctc
                                                                     2280
catatttgtt aataatttac tattatttac aaagattcaa atgcttttat gactaatgta
                                                                     2340
aaatgaaaag aggcttacat tttaaatgtt attaaaatta tgtacttaaa tctataatta
                                                                     2400
tttaattatt gtaaaaagtc caagcagatc aataaactat ataattaatg ggtttggaaa
                                                                     2460
atcatcaccc tactgaactt acaaaatatc ttgaaaatgt gaaaaatatc attttaaata
                                                                     2520
atgggtacat tgtataagtg gaagctataa ttttcaacaa aaagatggta caaatgtaaa
                                                                     2580
agtaaaaagc acaaactata caaaagcaaa atctatggcc aagtgattta aaagcattac
                                                                     2640
ttgtacattc ctttaaacat ttgttgttag aagcaaaaga gtaatttatc ctgctaaatt
                                                                     2700
tggcaccatt tgtaattata aaaattttga ttaatactat ttatattaat ttctttacct
                                                                     2760
tcattttttc tccttaagga gttgattgtt tttggaaatg ttttttcct tgcacataag
                                                                     2820
acagtttcat accattctta tagaatcata ttaggtgggt gtttgcacat actaaattta
                                                                     2880
taaagctagt tttgattaaa gctctatgtg agatatatat acatacacaa gtcttctata
                                                                     2940
ataagagtcg ttggtgaatt ttgaattcta ttttgttagg aattaaggtt gaaatcaaca
                                                                     3000
tgaaagaatc tcaatcatgc attataaaat aaaagtacat gggtgttaag aaacaagaga
                                                                     3060
cttttaaaga tttaaaatat atttctgata gaatttaact aagtggtgtg tattttaaaa
                                                                     3120
ttcacattct taaacataaa tctatccaag atagaaaatg aaatagctgg actactcttt
                                                                     3180
ctttaagata cttgaaaatt ttaaaccaca ttgcaacact ttatggtgct ttgcgtgttt
                                                                    · 3240
ggcatgacat acacagtggt cctggtatat aagtgcttgg gggaaaatac atattttgtt
                                                                     3300
tacattaaat tttgaagtga tttaggcttt attgaaaaca atactggcct tccctccct
                                                                     3360
tetetaaeat eeatttteat ttaegttatt taaaatatae aggeaetgtt ttgggtaeag
                                                                     3420
aggatatagc caagagcaaa ttgatagtag tttacctcag agtattaaaa aaatcataat
                                                                     3480
```

```
aaqtcatqtt aatctaaaac tatataatag ccttagatta aatgtgcaga tqtctaatta
                                                                     3540
aagatttaaa atgtatagcg tatgtcctta gaacatttga tttttaggta tacattcggc
                                                                     3600
aaaaacagtc tgttatggaa aagaaggatt gatgggacat taacttcttc cgagctaaca
                                                                     3660
ttgtttctga agattgacct attctatata aatttaaatt tttctatgtt tttcttttt
                                                                     3720
tttttgcgat gaggtttcgc tcttgttgcc caggctggag tacaaggggg ggatcttagc
                                                                     3780
tcaccgcaac ctccgcctcg ggggttcaaa tgattctcct gtctcagcct cctgagtaac
                                                                     3840
tggggttaca agcgcccacc attacgccca gctaattttt ggtatttttg gtagacacag
                                                                     3900
ggtttcacca tgttggccag gctggtcttc aactcctgac cccaggtgat ccgcccacct
                                                                     3960
cagectecca aggtgetggg attgcaggeg tgagecaceg tacceggeet etategtata
                                                                     4020
ttataattgc ttattgttat agaagctgaa tgttttactt actactttta aatttatttg
                                                                     4080
gtottoccaa ggaaatoata caaacggtag agattatgat aatotgagca ttotgtqtqc
                                                                     4140
ttagtttgat ttttttattt ataagcagta ctatttttat agatgtttaa aattcataaa
                                                                     4200
acactgtatt ctgagaggta ggtattattc aaatgttaga aatttttttt aaaaaaatgc
                                                                     4260
cctqaqqctt agaaaqqaca aatqactqaa atcacaatta qtaatctqqt ctttaqactt
                                                                     4320
aaageetagt tatatgettt tattataget tagteattaa tteacacatt tteeettate
                                                                     4380
ttttttatct tttaaaggtg accataaaac tttaaattgt gtgtgtacgt ctatgtatga
                                                                     4440
ggtatatgtt accetgtttg tgttattcaa actacctaaa agataggatg atttttgttt
                                                                     4500
aagtgaatcc caaactagca gtctgagaaa tacaggaaag cctgataatt gacttaccag
                                                                     4560
agttggcttt ttttttttaa gttaccataa tttagatata aagttgtcat gtcctggaat
                                                                     4620
ttaaaaaaga aatetetage tgagagatgt taatggteag gagttgaaaa tgacaattgt
                                                                     4680
getttgettt ttatttttat titttgitta ettitgagit tittggagit tittteetat
                                                                     4740
atttttaatt gagaagtaaa aattatatat ttatggtgta caacacgatg tgafacatgt
                                                                     4800
atacettgtg gaatggetaa ateaagetgt etaacatgtt aceteacaaa etttttttgt
                                                                     4860
agcgagaaca cttaaaattt tgtaacaatt ttcaagtata cagcatattg ttattaactg
                                                                     4920
taatcacgtg atatacagta gatctcttga acttatattt actaactgca atttcgtgtc
                                                                     4980
cttttacaaa catctcccca tttccccatc ccccagcctc tgataaccag aattttactc
                                                                     5040
tecateceat gaagttgact ttttttgeac teegtaagtg agateateta gaattttgge
                                                                     5100
atgtetttet gigeetgget tatticaett aacacagigg teeceigtgi ageigggaee
                                                                     5160
acaggegtgt gecaetacae ceaggtttat ceatgttgte agaaatgaca ggattteett
                                                                     5220
tttttaaaag ttgaatggta ttctcttatg tatattttcc acatttgctt tttccattca
                                                                     5280
tecattgatg gacagttaaa ttgattecat atettggeta ttgagtaatg etgeagtgaa
catgggattg cagatatete ttecacatae tgatttegtt teetttgaac atataccaaa
                                                                     5400
tagtgggatt ggtggataat atggtagttc tattttttaa tgttttgagg accctccata
                                                                     5460
ctgttttcca taatggctat aataatttac attgccacca acaqtqtaca aaqcttttct
                                                                     5520
ttccttttct ctgcatcctc tccaacactt cccttttgtc ttcttgataa tagtcattct
                                                                     5580
aacgggtatg attacagtag ctttgtagtg ggttttctgt gctgtgcttt ttaatttcat
                                                                     5640
gtatgtaaaa aacattgggt attttgaatg tttttctttt ctcaccttat cctagaactt
                                                                     5700
gaggetggge geggtggete atecetgtag teteageact ttgggaggee aaattgggea
                                                                     5760
gatcacttga ggtcaggagt tcgagaccag cctggccaac atggtgaaac cccatttcta
                                                                     5820
ctaaaaatac aaaaattagc caggcgtggt ggtgcacgcc tgtagtccca gccaatcagt
                                                                     5880
aggctgaggc acgagaatcg cttgaaccca ggaggccaag gctgcagtga gccacgattg
                                                                     5940
caccactgca ctctaacctg agcaacacag actccatctc
                                                                     5980
```

```
<210> 5463
<211> 533
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(98)
<223> similar to gi976252 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5463
ttggattaaa caaccattta ttatggggca aactgcaagc aagcactttg aacacatgga
                                                                       60
ttttttggaa gaaaggtgac aagaaaatca gagaaaacat cattgcattt ttagggggaa
                                                                      120
aactacaaat ttctaattta gctgcagaaa aaataattag agaacacaaa taaaatgtac
                                                                      180
tagtgaatac atgettetet agacecaaac aaaaactatt tgeaacgtaa ttaaaacagg
                                                                      240
ttaagtgctg tgaaaaatag aaacatggtg acatagaaga gcctgacggg ggaacctaac
                                                                      300
cgagtcctga gagtgtaagc cagcttcccc aaggaagtga cacttcaacc gagatctgaa
                                                                      360
ggacagcagt ctataaatga agtagagaaa ggcagtgctg agggcagagg gcacctgcat
                                                                      420
gggcagaggc tgggagcaag atgagtacag cgtgccccaa gtaatcagga agtgccagtg
                                                                      480
gctggagtgc agagacagca gcgcagtttt agctagagat gagagtaagg gag
                                                                      533
```

```
<210> 5464
<211> 1882
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1883)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (7)...(1298)
<223> similar to gi4581082 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5464
ggacttegge acgaggteac actgegggtg etceteaaag acgegetget ggageetgge
                                                                       60
geeggggtge tgteeateta etacetgggg aagaagttee tgggegaeet geageeagae
                                                                      120
ggaaggatca tgtggcagga gaccgggcag accttcaact cacccagcgc ctgggccacc
                                                                      180
cactgcaaga agetggtgaa ccctgccaag aagteggget gtggctggge etetgteaag
                                                                      240
tacaaaggcc agaaactgga caagtacaag gccacctggc tccggctgca ccagctgcac
                                                                      300
acgcctgcca cggctgctga tgagagccca gccagtgaag gggaggagga ggagttgctg
                                                                      360
atggaagagg aggaggagga cgttctggcg ggggtctcag cagaggacaa gagtcggaga
                                                                      420
ccactgggga agagcccttc agagcctgcc cacccggagg ccacaacccc agggaagcgg
                                                                      480
gtggacagca agatccgggt tccggtccgc tactgcatgc tgggcagccg cgacttggcc
                                                                      540
aggaaccccc acaccctggt ggaagtaaca teetttgcag ccatcaacaa gttecageeg
                                                                      600
ttcaacgtgg ctgtttctag caacgtgctg ttcctgctgg acttccacag tcacctgaca
                                                                      660
cggagtgagg tegtgggtta eetgggggge egetgggaeg teaacageca gatgetgaeg
                                                                      720
gtgctcagag ccttcccttg tcggagccgg ctcggggacg caaagactgc agctgccatc
                                                                      780
gaagaggaga tetaccagag cetgtteetg eggggeetgt eeetggtggg etggtaceae
                                                                      840
agccacccac acagecegge getgecatet etgeaggaea tegaegeaea gatggaetae
                                                                      900
cagctgcggc tgcagggctc cagcaatggc ttccagccct gcctcgccct gctctgctcc
                                                                      960
cettactatt etggeaacce aggeeeegag tecaagatet egeetttetg ggtgatgeet
                                                                     1020
cctcccgage aaaggcccag tgactatggc atccccatgg atgtggagat ggcctacgtc
                                                                     1080
```

```
caggacaget teetgaceaa tgacateett caegagatga tgetgetggt ggagttetae
                                                                     1140
aagggtteee etgacetegt gaggeteeag gaaceetgga gecaggagea cacetacete
                                                                     1200
gacaagetta agateteett ggecageagg aegeceaagg accagageet gtgteaegte
                                                                     1260
ctggaacagg tgtgcggcgt cctcaagcag gggagctgag ccttccaggg cagggtgggc
                                                                     1320
tccagttgtc ttgagggtcc ggatgggctc aagttctgga gggggtcaat gaagttctgc
                                                                     1380
ttgacctcga tgtccaggga gtccttcacc tctgccaggc gcttcatgga ctcgccggca
                                                                     1440
tecageaatg egteacetgt ggagaagtgg tgggggaage cateataceg ggeetgggae
                                                                     1500
cactagactg agacactcct cagcetttgt ttttgaaata gegtttcaca ggetggaacg
                                                                     1560
                                                                     1620
cagtggcgct gtaccagctc actgcaggcc tcaaactggg ctcaagccat gctggcacct
                                                                     1680
cagectecca agtageeggg accaeaggeg tteaceecca cacetggate etttecaaet
                                                                     1740
tetttgagat gaagtetege tgttgeecag getgeagtge agtggeatga teteagetea
                                                                     1800
etgeaacete tgeeteecag gtteaageaa tteteetgte teageeteet gagtaagggg
                                                                     1860
gattacaggg gcctgccacc acatccagct aatttttgta tttttaatag agacgggttt
                                                                     1882
caccatatag accnacaaaa aa
```

```
<210> 5465
<211> 2567
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5)...(1474)
<223> similar to gi3874391 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5465
atcgttacga tatcattacg ccaagcttgg cacgaggcaa agtgacaaat ggcctacagc
                                                                       60
tgtgagagca aatggacatc tcctcctgaa ctctgagaag atgtcaaaat ccacaggcaa
                                                                      120
ettecteact ttgacceaag ctattgacaa attttcagca gatggaatge gtttggetet
                                                                      180
ggctgatgct ggtgacactg tagaagatgc caactttgtg gaagccatgg cagatgcagg
                                                                      240
tattctccgt ctgtacacct gggtagagtg ggtgaaagaa atggttgcca actgggacag
                                                                      300
cctaagaagt ggtcctgcca gcactttcaa tgatagagtt tttgccagtg aattgaatgc
                                                                      360
                                                                      420
aggaattata aaaacagatc aaaactatga aaagatgatg tttaaagaag ctttgaaaac
agggtttttt gagtttcagg ccgcaaaaga taagtaccgt gaattggctg tggaagggat
                                                                      480
gcacagagaa cttgtgttcc ggtttattga agttcagaca cttctcctcg ctccattctg
                                                                      540
tecacatttg tgtgageaca tetggacaet cetgggaaag cetgacteaa ttatgaatge
                                                                      600
ttcatggcct gtggcaggtc ctgttaatga agttttaata cactcctcac agtatcttat
                                                                      660
ggaagtaaca catgacctta gactacgact caagaactat atgatgccag ctaaagggaa
                                                                      720
gaagactgac aaacaacccc tgcagaagcc ctcacattgc accatctatg tggcaaagaa
                                                                      780
ctatccacct tggcaacata ccaccctgtc tgttctacgt aaacactttg aggccaataa
                                                                      840
cggaaaactg cctgacaaca aagtcattgc tagtgaacta ggcagtatgc cagaactgaa
                                                                      900
gaaatacatg aagaaagtca tgccatttgt tgccatgatt aaggaaaatc tggagaagat
                                                                      960
ggggcctcgt attctggatt tgcaattaga atttgatgaa aaggctgtgc ttatggagaa
                                                                     1020
tatagtetat etgaetaatt egettgaget agaacacata gaagteaagt ttgeeteega
                                                                     1080
agcagaagat aaaatcaggg aagactgctg tcctgggaaa ccacttaatg tttttagaat
                                                                     1140
agaacctggt gtgtccgttt ctctggtgaa tccccagcca tccaatggcc acttctcaac
                                                                     1200
caaaattgaa atcaagcaag, gagataactg tgattccata atcaggcgtt taatgaaaat
                                                                     1260
gaatcgagga attaaagacc tttccaaagt gaaactgatg agatttgatg atccactgtt
                                                                     1320
ggggcctcga cgagttcctg tcctgggaaa ggagtacacc gagaagaccc ccatttctga
                                                                     1380
```